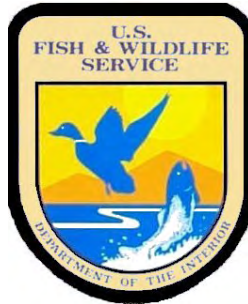


The Road Inventory of Ouray National Wildlife Refuge Randlett, UT



Prepared By:
Federal Highway Administration
Central Federal Lands Highway Division
April 2008



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INTRODUCTION

The Transportation Equity Act for the 21st Century (Public Law 105-178) created the Refuge Roads Program. Refuge roads are those public roads that provide access to or within a unit of the National Wildlife Refuge System and for which title and maintenance responsibility is vested in the United States Government. Funds from the Highway Trust Fund are available for refuge roads and can be used by the station to pay the cost of:

- (a) Maintenance and improvements of refuge roads.
- (b) Maintenance and improvements of:
 - (1) Adjacent vehicle parking areas
 - (2) Provision for pedestrians and bicycles and
 - (3) Construction and reconstruction of roadside rest areas that are located in or adjacent to wildlife refuges
- (c) Administrative costs associated with such maintenance and improvements.

The funds available for refuge roads are to be disbursed based on the relative needs of the various refuges in the National Wildlife Refuge System, and taking into consideration:

- (a) The comprehensive conservation plan for each refuge;
- (b) The need for access as identified through land use planning; and
- (c) The impact of land use planning on existing transportation facilities.

To determine the relative needs of the U.S. Fish and Wildlife Service, the Federal Highway Administration (FHWA) was asked to inventory all public access roads and parking lots and provide a condition assessment of each. In 2008 the inventory was expanded to include administrative (service use only) roads and parking lots. An FHWA representative meets with refuge personnel to identify route segments and assign route numbers and functional classifications (See Appendix) for each route. All roads and parking lots are mapped using Trimble GPS units and visually assessed for condition using the RSL method of evaluation developed at Utah State University (See Appendix). Culverts, Gates, Guardrails and Low Water Crossings are also mapped and inspected for any obvious defects.

An estimate is provided, in year 2008 dollars, based on the condition determined by the rating system. Estimates are based upon data and location factors from the 2008 RS Means Heavy Construction Cost Data 22nd Annual Edition. Cost estimates should be evaluated on a case-by-case basis when being used for programming purposes.

Native Surfaced roads and parking lots already inventoried will not be re-inventoried and will not appear individually in report chapters 5, 6 and 8. Mileages and areas of native surfaced roads and parking lots will still appear in all summaries in the report and will remain in the road inventory database. In addition to this report, the FHWA will furnish the condition ratings of each route and segment to the Fish and Wildlife Service in a Microsoft Access database so the data can be included in their Real Property Inventory.

Ouray National Wildlife Refuge

Summaries

Route Miles and Percentages by Functional Class and Condition

F. C.	Condition Rating (Based on RSL)*										TOTAL MILES
	Excellent		Good		Fair		Poor		Failed		
	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	
I	1.65	14.8%	9.46	85.2%							11.11
II	3.63	30.8%	2.59	22.0%	2.52	21.4%			3.03	25.8%	11.77
III											
IV	0.27	41.4%	0.29	44.5%	0.09	14.1%					0.66
V	2.82	16.9%	12.44	74.7%	0.39	2.3%	1.	6.0%			16.65
Totals	8.37	20.8%	24.79	62%	3.00	7.5%	1.00	2.5%	3.03	7.5%	40.19

*For a description of condition ratings for the various surface types see the Appendix.

Route Miles and Percentages by Surface Type and Condition

S. T.	Paved Condition Rating [Condition(RSL)]										TOTAL MILES
	Excellent (19-20)		Good (13-18)		Fair (7-12)		Poor (1-6)		Failed (0)		
	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	
AS											
CO											
Totals											

S. T.	Unpaved Condition Rating [Condition(RSL)]										TOTAL MILES
	Excellent (8-10)		Good (5-7)		Fair (3-4)		Poor (1-2)		Failed (0)		
	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	
GR	6.29	31.8%	11.32	57.3%	2.15	10.9%					19.76
NA	2.08	10.2%	13.47	65.9%	0.85	4.2%	1.	4.9%	3.03	14.8%	20.43
PR											
Totals	8.37	20.8%	24.79	61.7%	3.00	7.5%	1.00	2.5%	3.03	7.5%	40.19

Square Footage (Parking Areas)

S. T.	Condition Rating										Total Square Feet
	Excellent		Good		Fair		Poor		Failed		
	Square Feet	%	Square Feet	%	Square Feet	%	Square Feet	%	Square Feet	%	
AS			16079	47.7%			17651	52.3%			33730
CO											
GR	7567	10.8%	27320	38.9%	27034	38.4%	8399	11.9%			70320
NA											
PR											
Totals	7567	7.3%	43399	41.7%	27034	26.0%	26050	25.0%			104050

Ouray National Wildlife Refuge

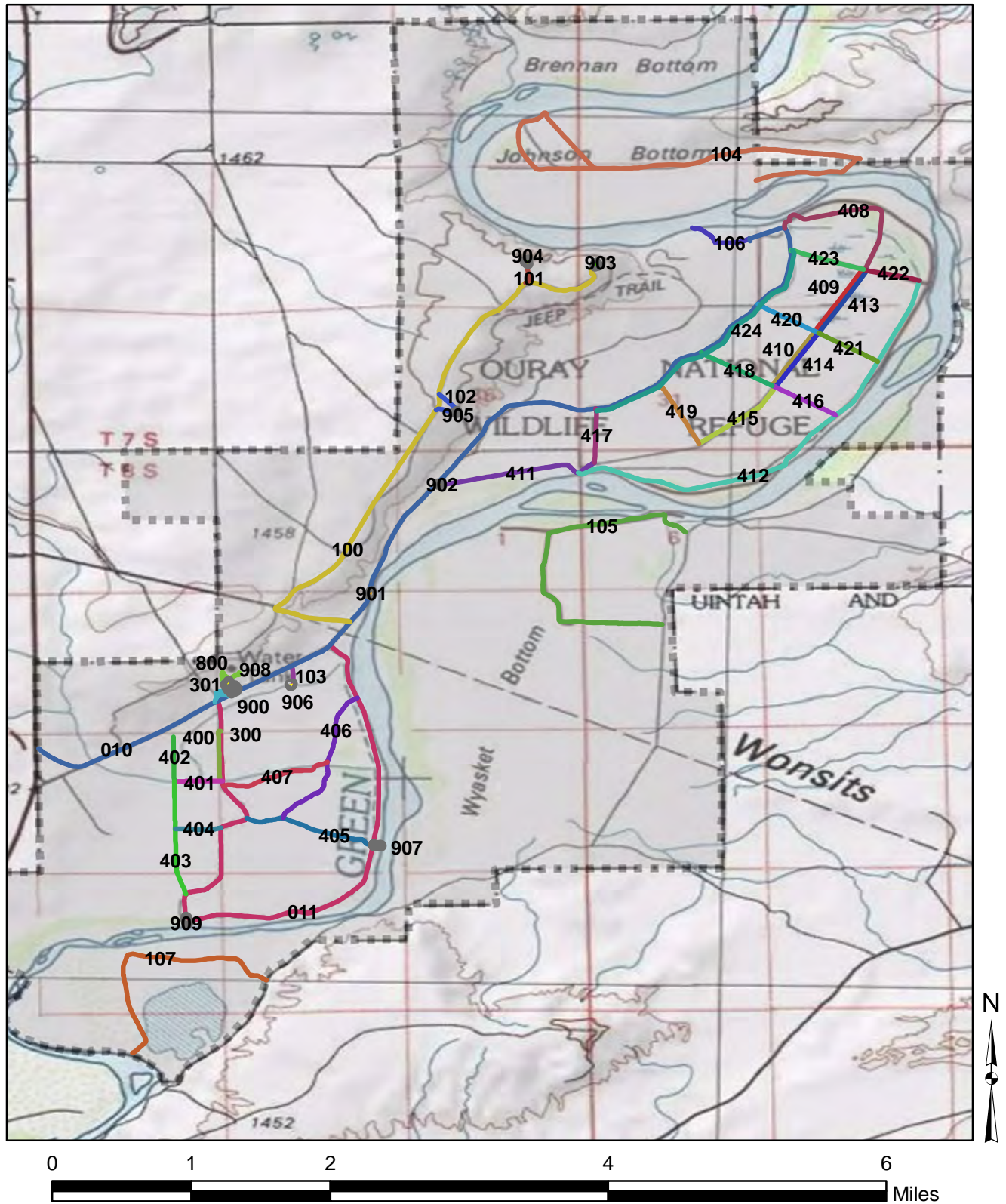
Summaries

Route Miles and Percentages by Use Type and Condition

USE TYPE	Road Condition Rating: Public/Administrative Use										TOTAL MILES	PERCENT TOTAL MILES
	Excellent		Good		Fair		Poor		Failed			
	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%		
Public (FC I-III)	5.27	23.1%	12.05	53%	2.52	11.0%			3.03	13.3%	22.88	57%
Admin (FC IV-V)	3.09	17.9%	12.74	73.6%	0.48	2.8%	1.00	5.8%			17.31	43%
Totals	8.37	20.8%	24.79	62%	3.00	7.5%	1.00	2.5%	3.03	7.5%	40.19	

USE TYPE	Parking Condition Rating										Total Square Feet	PERCENT TOTAL SF
	Excellent		Good		Fair		Poor		Failed			
	Square Feet	%	Square Feet	%	Square Feet	%	Square Feet	%	Square Feet	%		
Public	7567	9.5%	43399	54.7%	19934	25.1%	8399	10.6%			79299	76%
Admin					7100	28.7%	17651	71.3%			24751	24%
Totals	7567	7.3%	43399	41.7%	27034	26.0%	26050	25.0%			104050	

OURAY NATIONAL WILDLIFE REFUGE ROUTE LOCATION MAP



Ouray NWR - 65570 - ROUTE IDENTIFICATION LIST (NUMERIC)

Shading Color Key:

White = Paved Routes
Yellow = Unpaved Routes

RTE #	Asset Number	ROUTE NAME	RTE MI	ROUTE DESCRIPTION	PAVED MI	UN-PAVED MI	LANES	FC
010	10034478	Refuge Entrance/Hatchery Road	6.46	From UT Highway 88 to Hatchery Parking Lot (Route 900)	-	6.46	2	1
011	10041436	Auto Tour Route	4.66	From Refuge Entrance/Hatchery Road (Route 010) to Refuge Entrance/Hatchery Road (Route 010)	-	4.66	1	1
100	10034480	Leota Bluff Road	3.73	From Refuge Entrance/Hatchery Road (Route 010) to Leota Bluff Parking (Route 903)	-	3.73	2	2
101	-	Leota Bluff Spur	0.14	From Leota Bluff Road (Route 100) to Johnson Bluff Parking (Route 904)	-	0.14	1	2
102	-	Green River Geology Loop	0.28	From Leota Bluff Road (Route 100) to end of loop	-	0.28	1	2
103	-	Wildlife Viewing Area Access Road	0.13	From Refuge Entrance/Hatchery Road (Route 010) to Wildlife Viewing Area Parking (Route 906)	-	0.13	1	2
104	10034600	Johnson Bottom Road	3.43	From County Road to end of route	-	3.43	1	2
105	10049831	Wyaskett Pond Loop	2.08	From County Road to end of route	-	2.08	1	2
106	-	Leota Boat Ramp Access Road	0.37	From Refuge Entrance/Hatchery Road (Route 010) to boat ramp	-	0.37	2	2
107	-	Woods Bottom Road	1.61	From County Road to end of route	-	1.61	1	2
300	10035922	Residential Driveway	0.31	From Refuge Entrance/Hatchery Road (Route 010) to end of loop	-	0.31	1	4
301	10035923	Maintenance Area Driveway	0.35	From Refuge Entrance/Hatchery Road (Route 010) to employee housing	-	0.35	2	4
400	10034579	Parker East Dike Road	0.37	From Auto Tour Route (Route 011) to S4/Parker Dike Road (Route 401)	-	0.37	1	5
401	10035927	S4/Parker Dike Road	0.27	From Auto Tour Route (Route 011) to West Parker Dike Road (Route 402)	-	0.27	1	5
402	10035926	West Parker Dike Road	0.32	From S3/S5 Dike Road (Route 403) to end of route	-	0.32	1	5
403	10035928	S3/S5 Dike Road	0.82	From West Parker Dike Road (Route 402) to Auto Tour Loop (Route 011)	-	0.82	1	5
404	10046005	S3/S4 Dike Road	0.25	From Auto Tour Route (Route 011) to S3/S5 Dike Road (Route 403)	-	0.25	1	5
405	10034606	S1/S2 Dike Road	0.75	From Auto Tour Route (Route 011) to Auto Tour Route (Route 011)	-	0.75	1	5
406	10034607	S1/S1A Service Road	1.02	From Auto Tour Route (Route 011) to S1/S2 Dike Road (Route 405)	-	1.02	1	5
407	10035914	S1/S1A Dike Road	0.62	From S1/S1A Service Road (Route 406) to Auto Tour Route (Route 011)	-	0.62	1	5
408	10034485	L1/L2 Main Leota Road	1.07	From Refuge Entrance/Hatchery Road (Route 010) to L1/L3 Dike Road (Route 424)	-	1.07	1	5
409	10040033	L4 East Dike Road	0.52	From L2/L4 Dike Road (Route 425) to L4/L6 Dike Road (Route 421)	-	0.52	1	5
410	10040036	L6 East Dike Road	0.45	From L4/L6 Dike Road (Route 421) to L6/L8 Dike Road (Route 419)	-	0.45	1	5
411	10034495	L10/River Dike Road	0.94	From L9/L10 Dike Road (Route 418) to Leota Bottoms Parking (Route 902)	-	0.94	1	5
412	10034496	L7/L3 Leota Riverside Dike Road	2.76	From L10/River Dike Road (Route 412) to L1/L3 Dike Road (Route 424)	-	2.76	1	5
413	10039985	L3 West Dike Road	0.52	From L1/L3 Dike Road (Route 424) to L3/L5 Dike Road (Route 423)	-	0.52	1	5
414	10040034	L5 West Dike Road	0.45	From L3/L5 Dike Road (Route 423) to L5/L7 Dike Road (Route 417)	-	0.45	1	5

Ouray NWR - 65570 - ROUTE IDENTIFICATION LIST (NUMERIC)

Shading Color Key:

White = Paved Routes
Yellow = Unpaved Routes

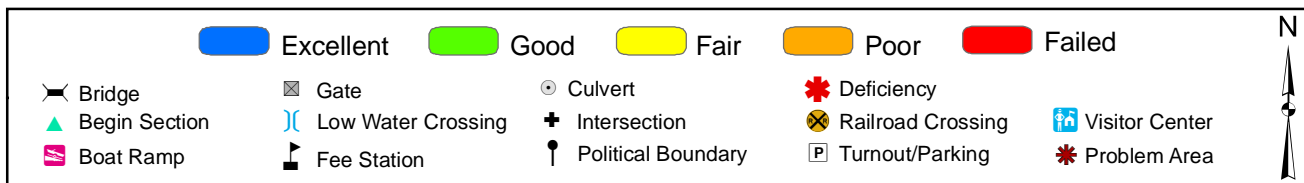
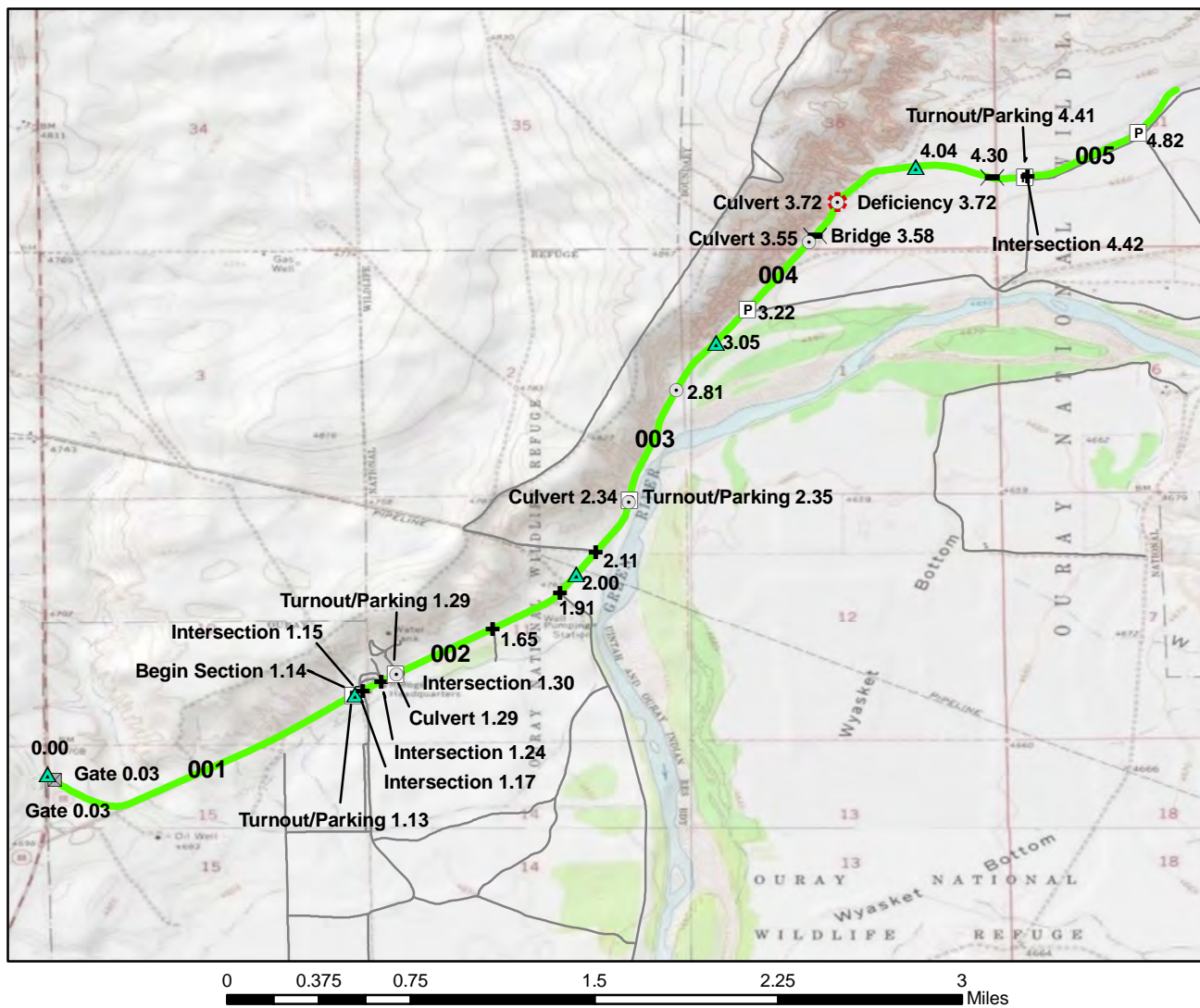
RTE #	Asset Number	ROUTE NAME	RTE MI	ROUTE DESCRIPTION	PAVED MI	UN-PAVED MI	LANES	FC
415	10040040	L7 West Dike Road	0.59	From L5/L7 Dike Road (Route 417) to L8/L9 Dike Road (Route 420)	-	0.59	1	5
416	10034490	L5/L7 Dike Road	0.41	From L6/L8 Dike Road (Route 419) to L7/L3 Leota Riverside Dike Road (Route 413)	-	0.41	1	5
417	10034494	L9/L10 Dike Road	0.39	From L10/River Dike Road (Route 412) to Refuge Entrance/Hatchery Road (Route 010)	-	0.39	1	5
418	10034491	L6/L8 Dike Road	0.46	From Refuge Entrance/Hatchery Road (Route 010) to L5/L7 Dike Road (Route 417)	-	0.46	1	5
419	10034493	L8/L9 Dike Road	0.47	From L7 West Dike Road (Route 416) to Leota North Service Road (Route 426)	-	0.47	1	5
420	10034489	L4/L6 Dike Road	0.39	From Refuge Entrance/Hatchery Road (Route 010) to L3/L5 Dike Road (Route 423)	-	0.39	1	5
421	10034488	L3/L5 Dike Road	0.38	From L4/L6 Dike Road (Route 421) to L7/L3 Leota Riverside Dike Road (Route 413)	-	0.38	1	5
422	10034486	L1/L3 Dike Road	0.32	From L7/L3 Leota Riverside Dike Road (Route 413) to L2/L4 Dike Road (Route 425)	-	0.32	1	5
423	10034487	L2/L4 Dike Road	0.43	From L1/L3 Dike Road (Route 424) to Refuge Entrance/Hatchery Road (Route 010)	-	0.43	1	5
424	10036035	Leota North Service Road	1.69	From L2/L4 Dike Road (Route 425) to L9/L10 Dike Road (Route 418)	-	1.69	1	5

Ouray NWR - 65570 - ROUTE IDENTIFICATION LIST (PARKING)

Shading Color Key:

Green = Unpaved Parking Lots
Blue = Paved Parking Lots

RTE #	ASSET NUMBER	ROUTE NAME	RTE SQFT	ROUTE DESCRIPTION	PAVED SQFT	UN-PAVED SQFT
800	10036044	Shop Gravel Parking	6622		-	6622
801	10034474	Shop Asphalt Parking	17691		17691	-
900	10034597	Office Parking	15451		15451	-
901		Boat Ramp Parking	7870		-	7870
902	10036034	Leota Bottoms Parking	4931		-	4931
903		Leota Bluff Parking	8531		-	8531
904		Johnson Bluff Parking	10859		-	10859
905		Green River Geology Parking	3023		-	3023
906		Wildlife Viewing Area Parking	6731		-	6731
907		Green River Parking	7567		-	7567
908	10036044	Overflow Office Parking	4317		-	4317
909	10036032	Sheppard Drain Parking	7956		-	7956

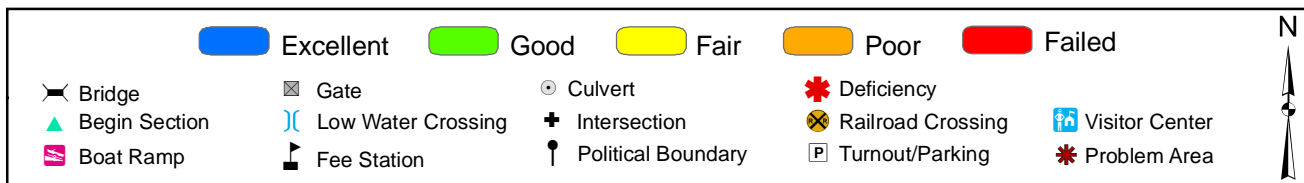
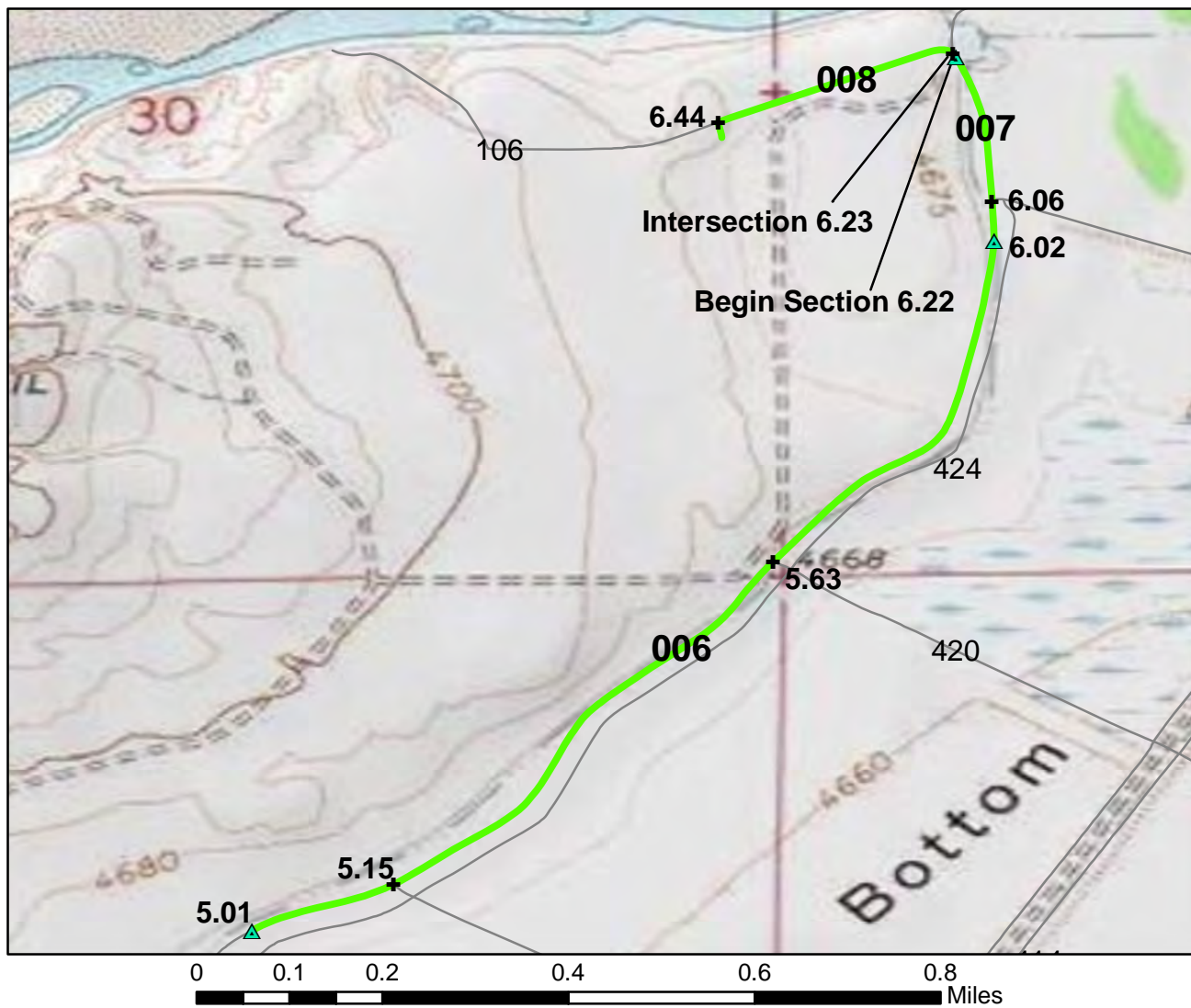


ROUTE: 010 Refuge Entrance/Hatchery Road TOTAL LENGTH: 6.46 Miles

ASSET: 10034478

RTE DESCRIPTION: From UT Highway 88 to Hatchery Parking Lot (Route 900)

Section Number	001	002	003	004	005
Section Length (miles)	1.14	0.86	1.06	0.99	0.97
Inspection Date	4/26/2008	4/26/2008	4/26/2008	4/26/2008	4/26/2008
Section Information					
Surface Type	Gravel	Gravel	Gravel	Gravel	Gravel
Number of Lanes	2	2	2	2	2
Roadway Width (feet)	24	24	24	24	24
Roadway Condition Information					
Condition	Good	Good	Good	Good	Good
Remaining Service Life (years)	7	7	7	7	7
Cost Estimate	\$1700	\$1300	\$1600	\$1500	\$1500
CRV	\$739400	\$555100	\$686400	\$642100	\$629200

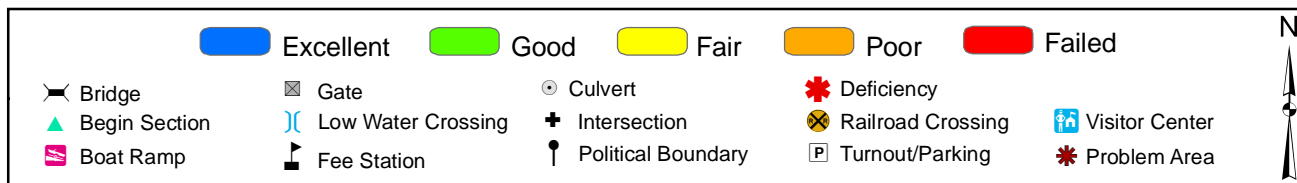
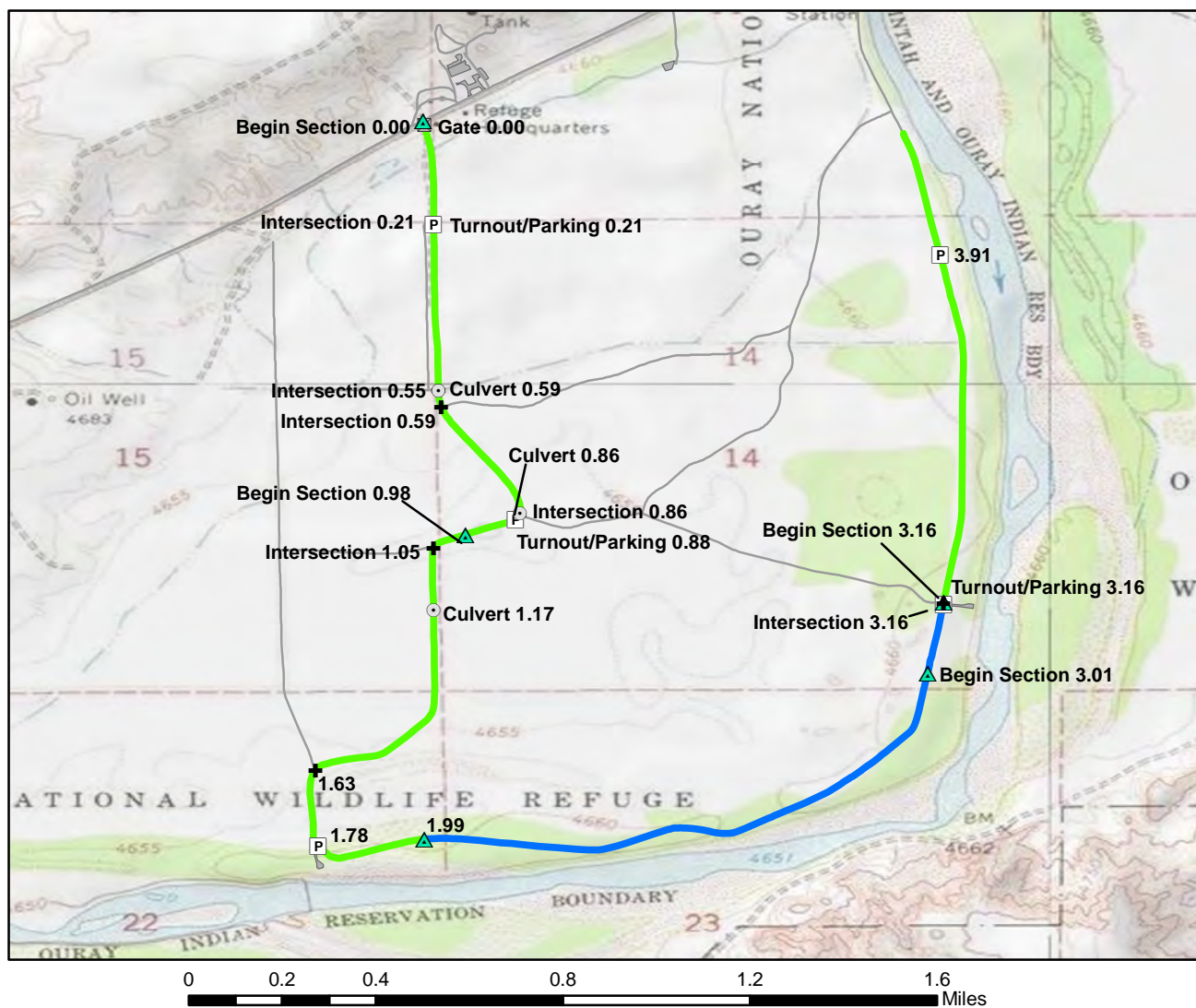


ROUTE: 010 Refuge Entrance/Hatchery Road TOTAL LENGTH: 6.46 Miles

ASSET: 10034478

RTE DESCRIPTION: From UT Highway 88 to Hatchery Parking Lot (Route 900)

Section Number	006	007	008		
Section Length (miles)	1.01	0.20	0.23		
Inspection Date	4/26/2008	4/28/2008	4/28/2008		
Section Information					
Surface Type	Gravel	Gravel	Gravel		
Number of Lanes	2	2	2		
Roadway Width (feet)	24	24	24		
Roadway Condition Information					
Condition	Good	Good	Good		
Remaining Service Life (years)	7	7	7		
Cost Estimate	\$1500	\$300	\$400		
CRV	\$655300	\$130300	\$150100		

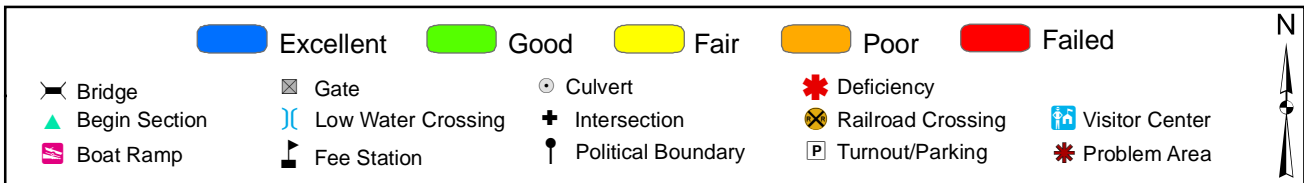
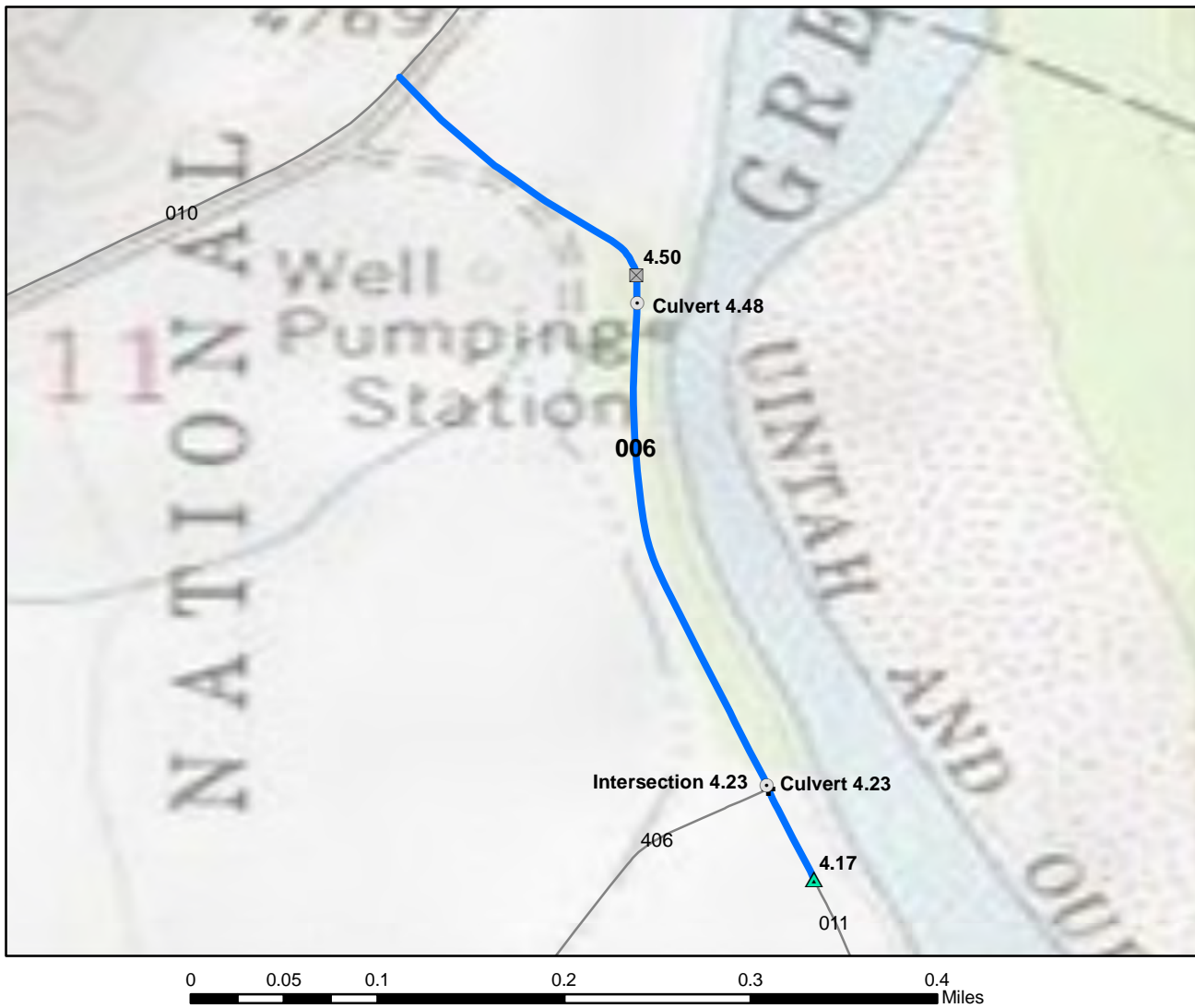


ROUTE: 011 Auto Tour Route TOTAL LENGTH: 4.66 Miles

ASSET: 10041436

RTE DESCRIPTION: From Refuge Entrance/Hatchery Road (Route 010) to Refuge Entrance/Hatchery Road (Route 010)

Section Number	001	002	003	004	005
Section Length (miles)	0.98	1.01	1.01	0.15	1.01
Inspection Date	4/26/2008	4/26/2008	4/26/2008	4/26/2008	4/26/2008
Section Information					
Surface Type	Gravel	Gravel	Gravel	Gravel	Gravel
Number of Lanes	1	1	1	1	1
Roadway Width (feet)	14	10	14	14	14
Roadway Condition Information					
Condition	Good	Good	Excellent	Excellent	Good
Remaining Service Life (years)	7	7	8	10	7
Cost Estimate	\$1500	\$1500	\$0	\$0	\$1500
CRV	\$637700	\$655100	\$657000	\$100000	\$658100



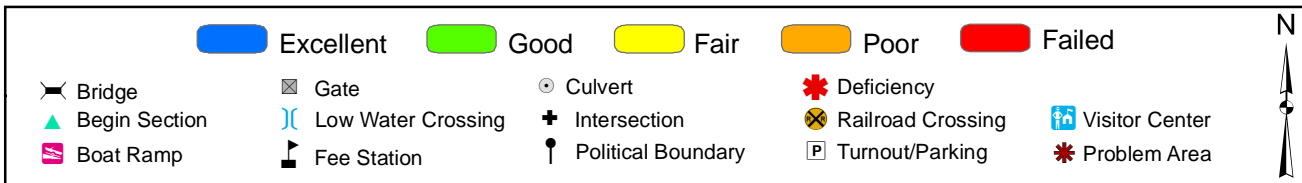
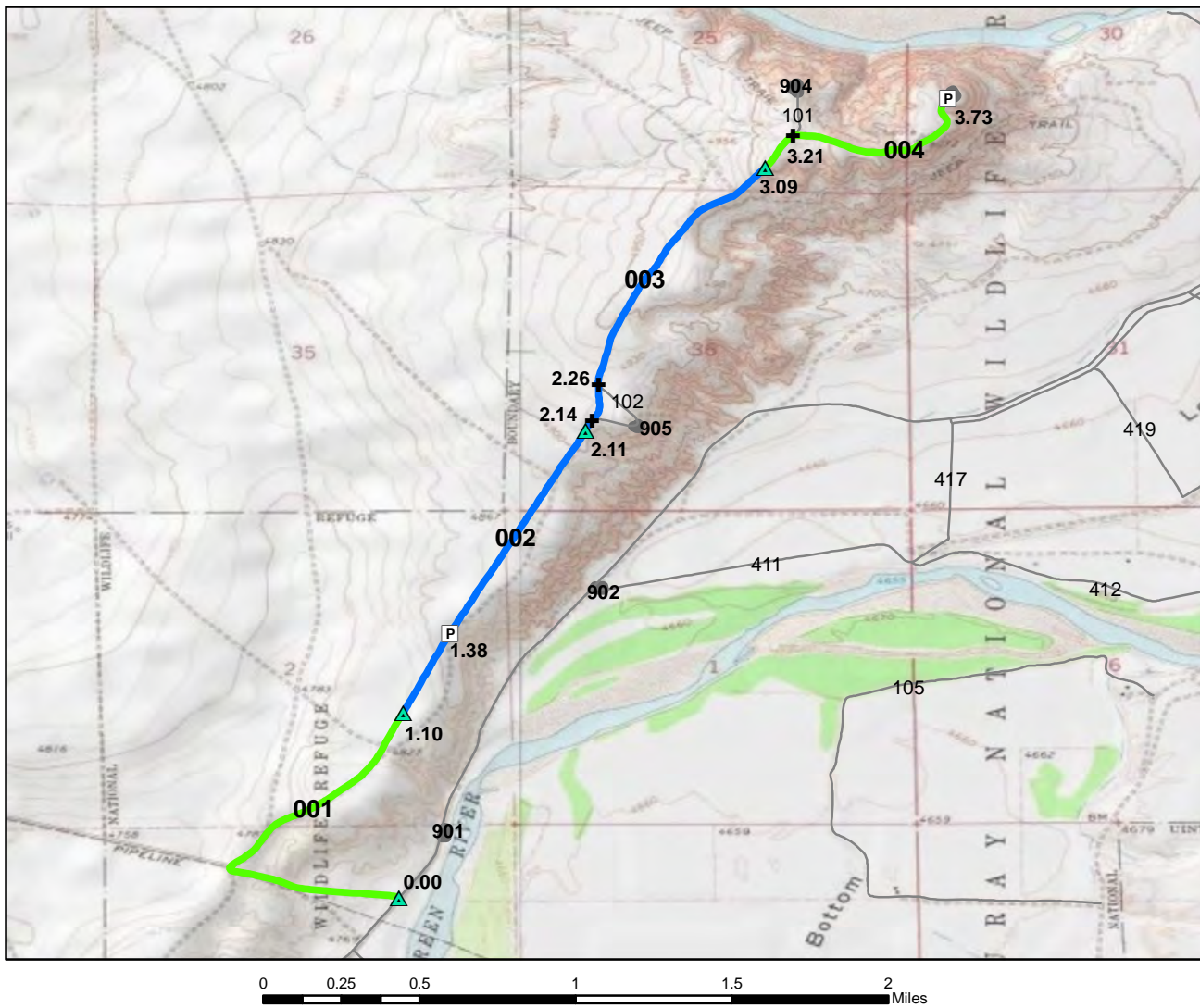
ROUTE: 011 Auto Tour Route

TOTAL LENGTH: 4.66 Miles

ASSET: 10041436

RTE DESCRIPTION: From Refuge Entrance/Hatchery Road (Route 010) to Refuge Entrance/Hatchery Road (Route 010)

Section Number	006				
Section Length (miles)	0.48				
Inspection Date	4/26/2008				
Section Information					
Surface Type	Gravel				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Excellent				
Remaining Service Life (years)	10				
Cost Estimate	\$0				
CRV	\$312100				



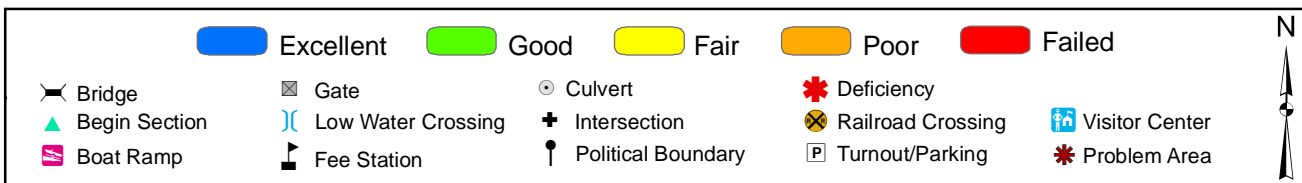
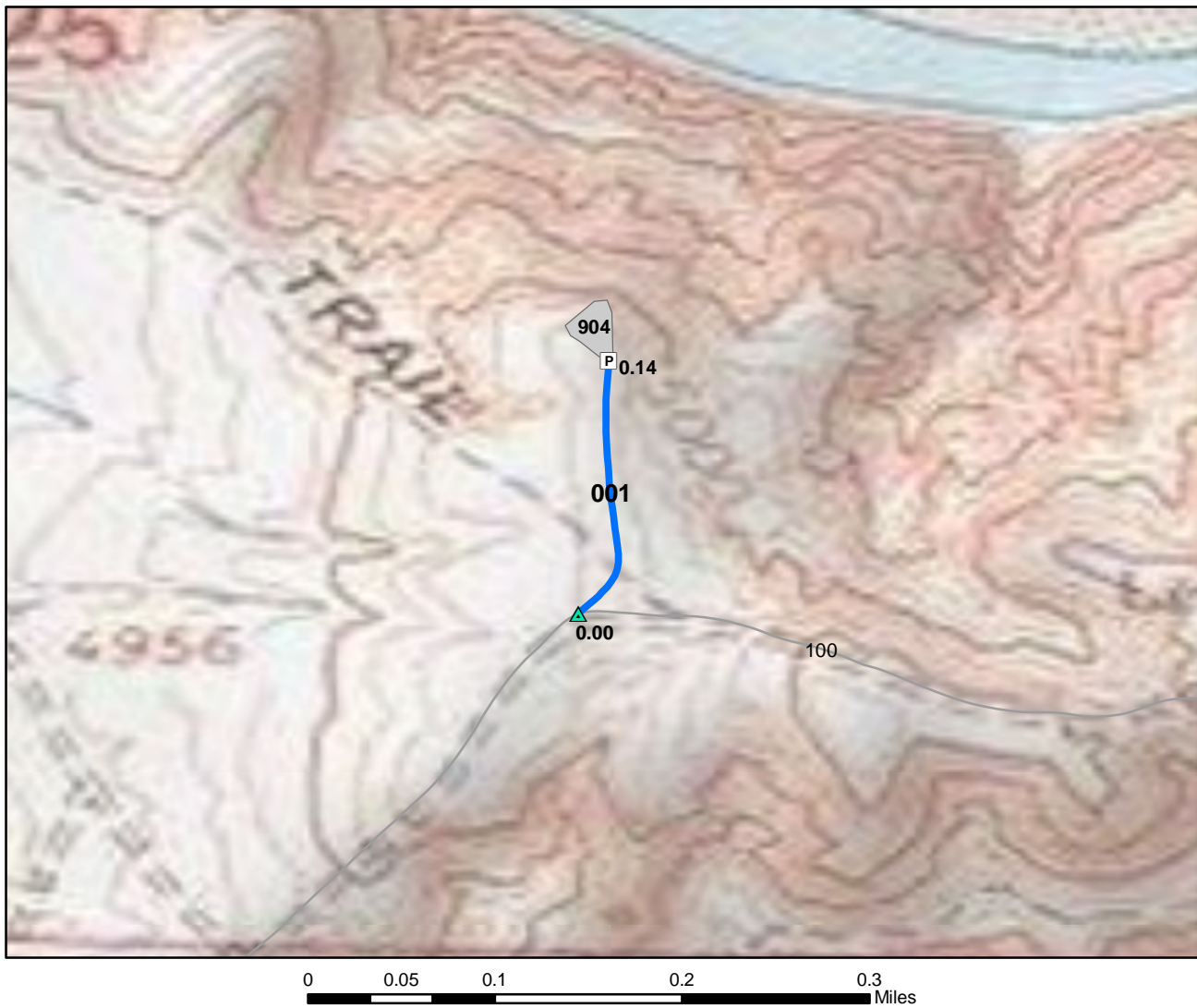
ROUTE: 100 Leota Bluff Road

TOTAL LENGTH: 3.73 Miles

ASSET: 10034480

RTE DESCRIPTION: From Refuge Entrance/Hatchery Road (Route 010) to Leota Bluff Parking (Route 903)

Section Number	001	002	003	004
Section Length (miles)	1.10	1.01	0.99	0.64
Inspection Date	4/26/2008	4/26/2008	4/26/2008	4/26/2008
Section Information				
Surface Type	Gravel	Gravel	Gravel	Gravel
Number of Lanes	2	1	1	1
Roadway Width (feet)	16	14	14	14
Roadway Condition Information				
Condition	Good	Excellent	Excellent	Good
Remaining Service Life (years)	7	8	8	7
Cost Estimate	\$1700	\$0	\$0	\$1000
CRV	\$714600	\$652600	\$639100	\$412900

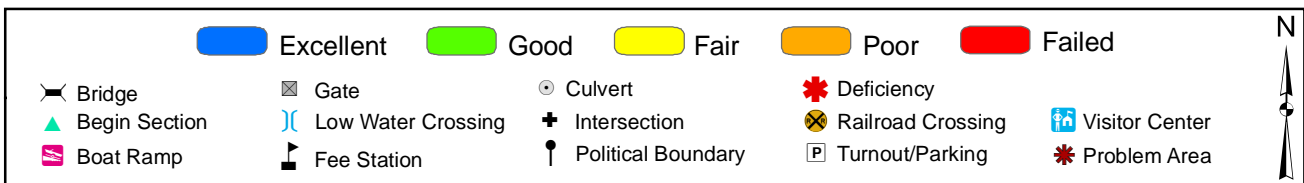
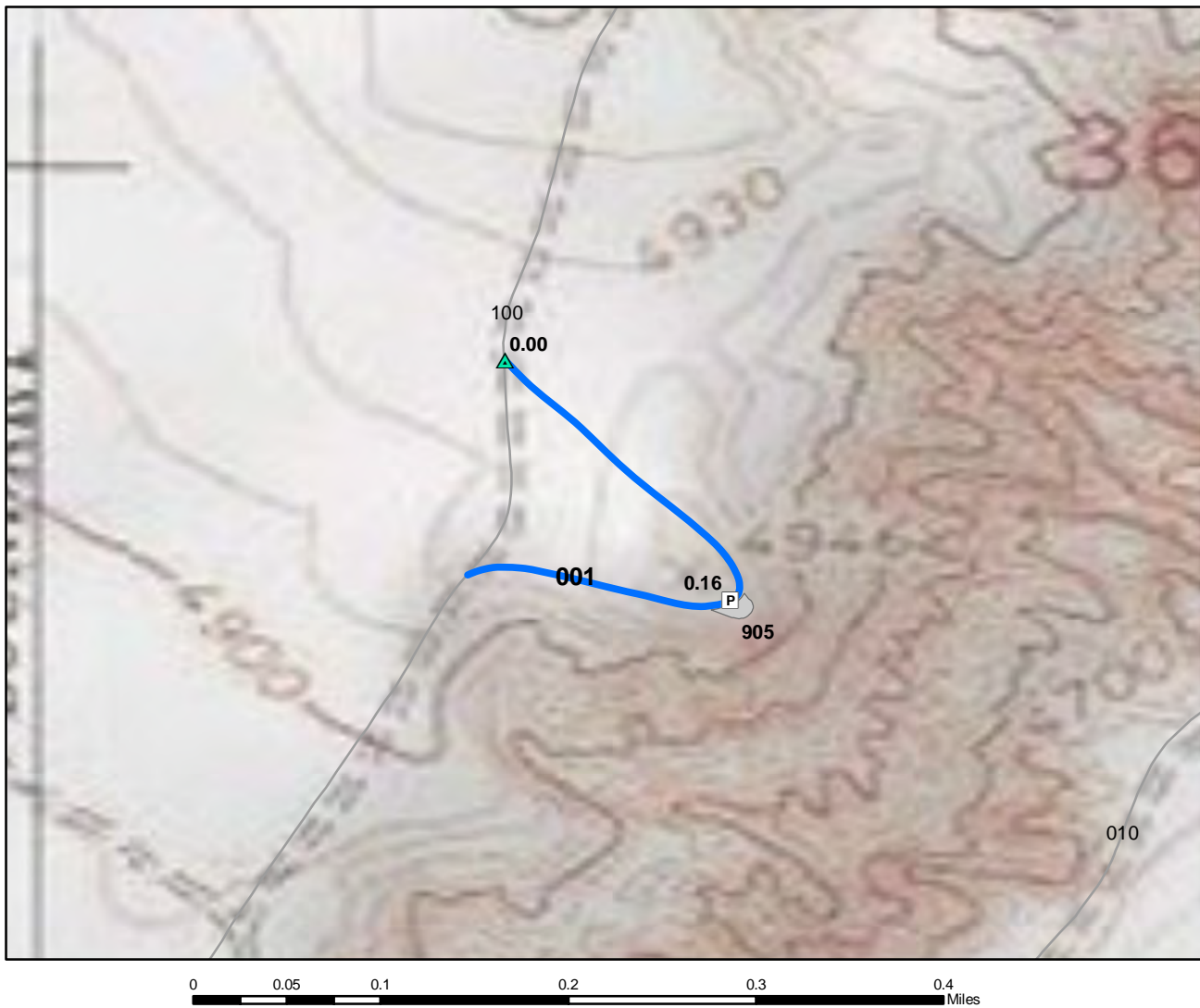


ROUTE: 101 Leota Bluff Spur TOTAL LENGTH: 0.14 Miles

ASSET:

RTE DESCRIPTION: From Leota Bluff Road (Route 100) to Johnson Bluff Parking (Route 904)

Section Number	001				
Section Length (miles)	0.14				
Inspection Date	4/26/2008				
Section Information					
Surface Type	Gravel				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Excellent				
Remaining Service Life (years)	10				
Cost Estimate	\$0				
CRV	\$91100				

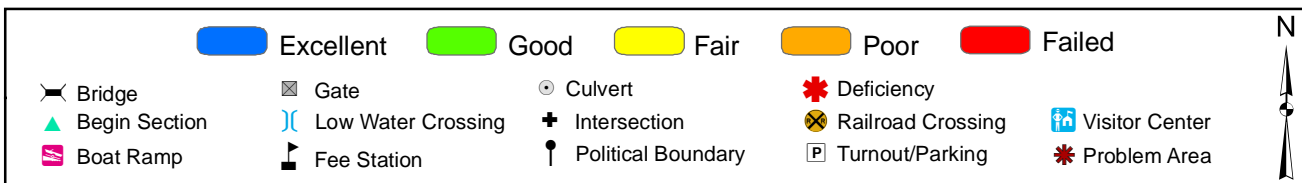
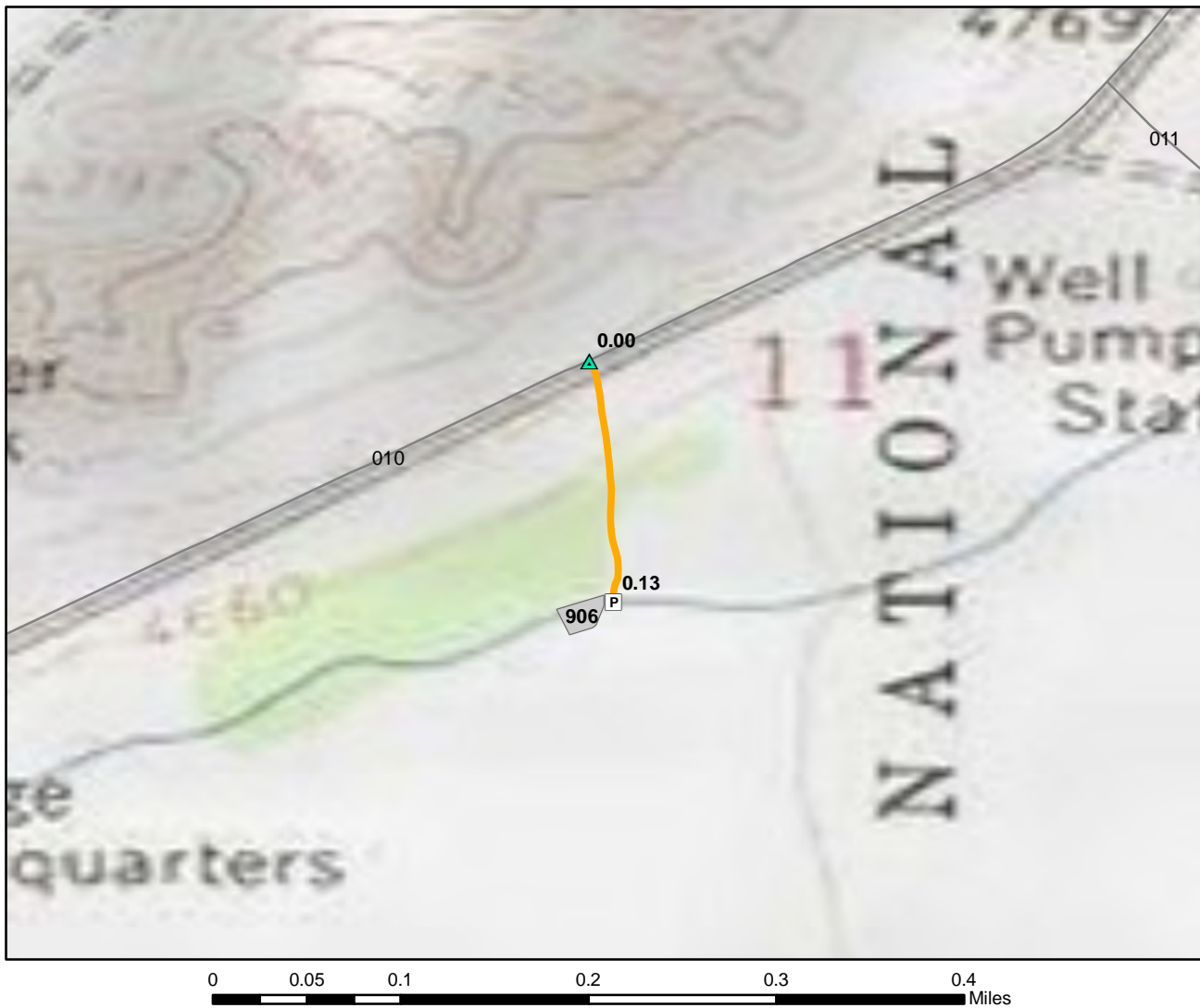


ROUTE: 102 Green River Geology Loop TOTAL LENGTH: 0.28 Miles

ASSET:

RTE DESCRIPTION: From Leota Bluff Road (Route 100) to end of loop

Section Number	001				
Section Length (miles)	0.28				
Inspection Date	4/26/2008				
Section Information					
Surface Type	Gravel				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Excellent				
Remaining Service Life (years)	9				
Cost Estimate	\$0				
CRV	\$178900				

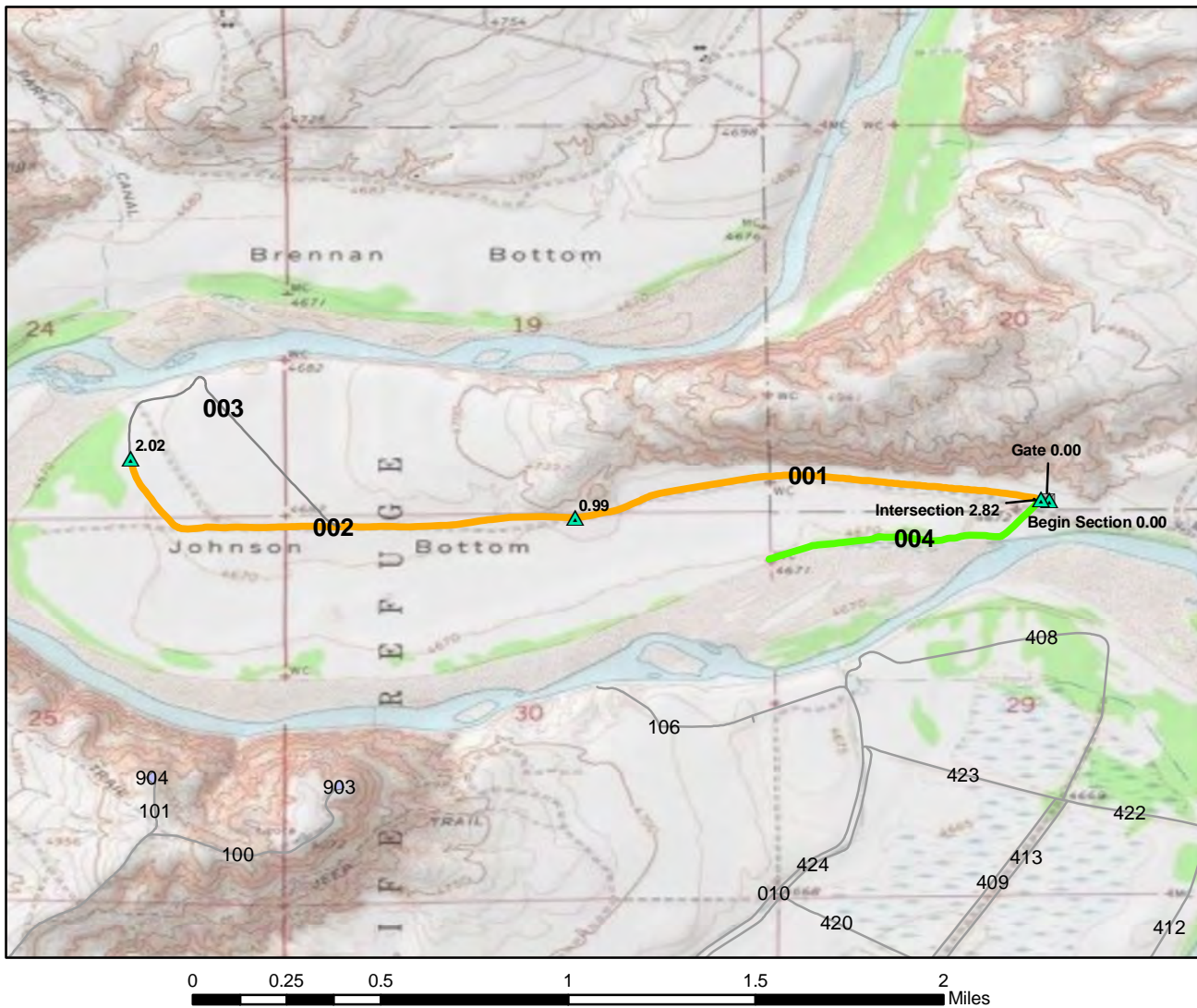


ROUTE: 103 Wildlife Viewing Area Access Road TOTAL LENGTH: 0.13 Miles

ASSET:

RTE DESCRIPTION: From Refuge Entrance/Hatchery Road (Route 010) to Wildlife Viewing Area Parking (Route 906)

Section Number	001				
Section Length (miles)	0.13				
Inspection Date	4/26/2008				
Section Information					
Surface Type	Gravel				
Number of Lanes	1				
Roadway Width (feet)	11				
Roadway Condition Information					
Condition	Fair				
Remaining Service Life (years)	4				
Cost Estimate	\$400				
CRV	\$85300				



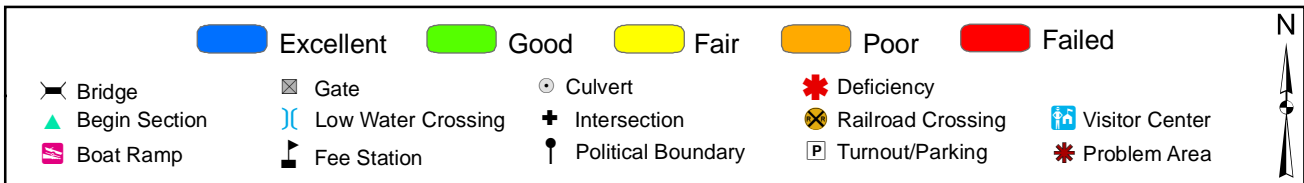
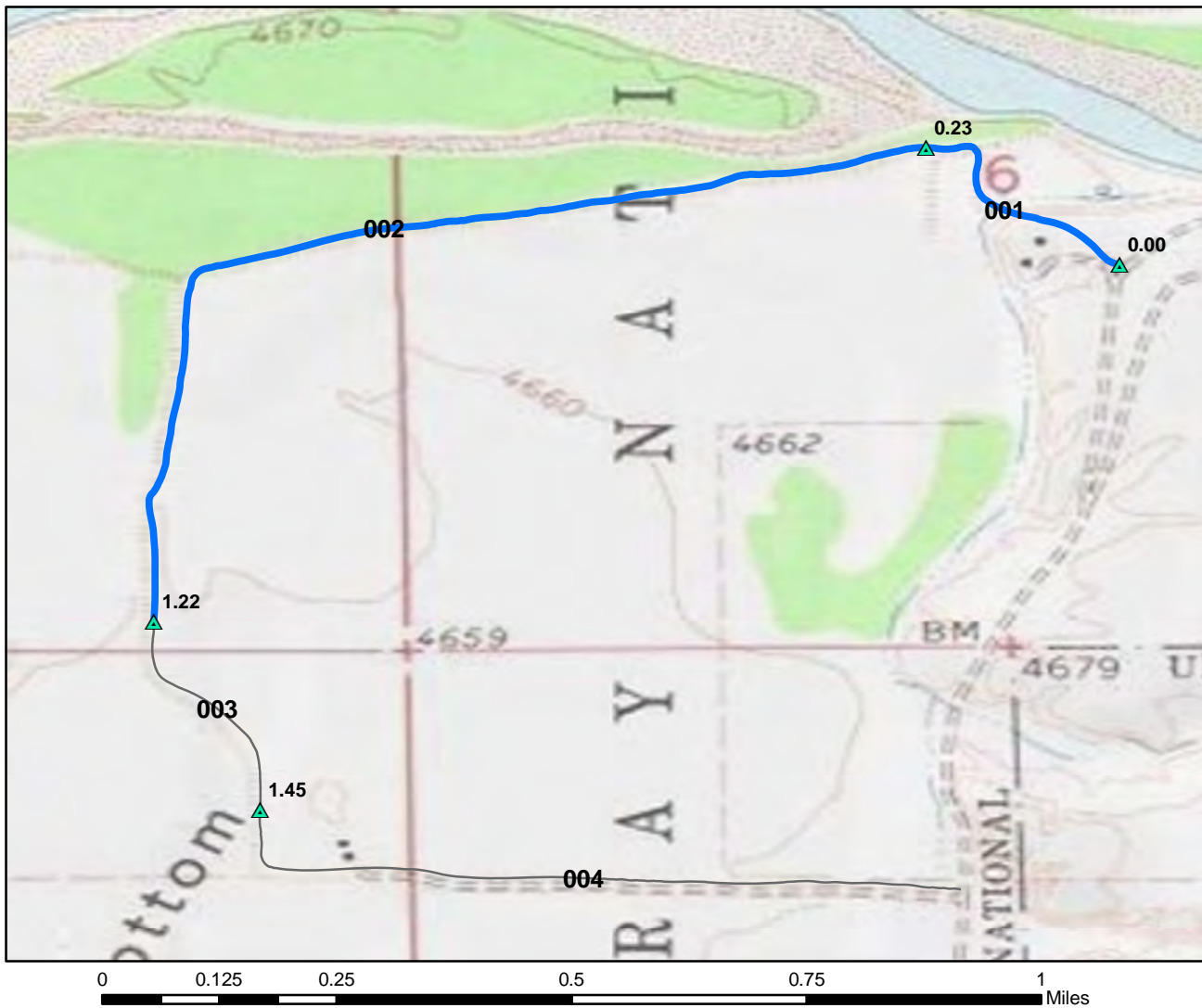
ROUTE: 104 Johnson Bottom Road

TOTAL LENGTH: 3.43 Miles

ASSET:

RTE DESCRIPTION: From County Road to end of route

Section Number	001	002	003		
Section Length (miles)	0.99	1.03	0.80		
Inspection Date	4/28/2008	4/28/2008	7/20/2004		
Section Information					
Surface Type	Gravel	Gravel	Native		
Number of Lanes	1	1	1		
Roadway Width (feet)	14	14	14		
Roadway Condition Information					
Condition	Fair	Fair			
Remaining Service Life (years)	4	4			
Cost Estimate	\$3300	\$3400			
CRV	\$644000	\$666200			

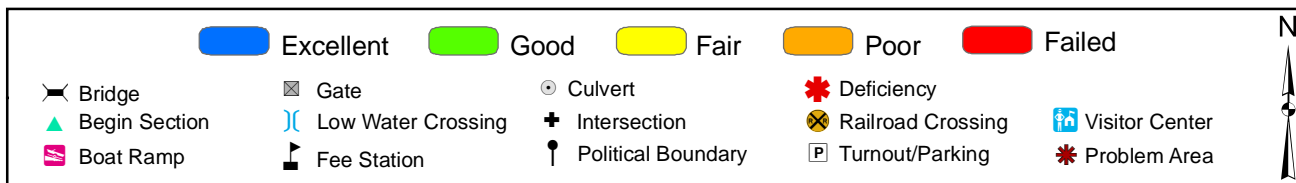
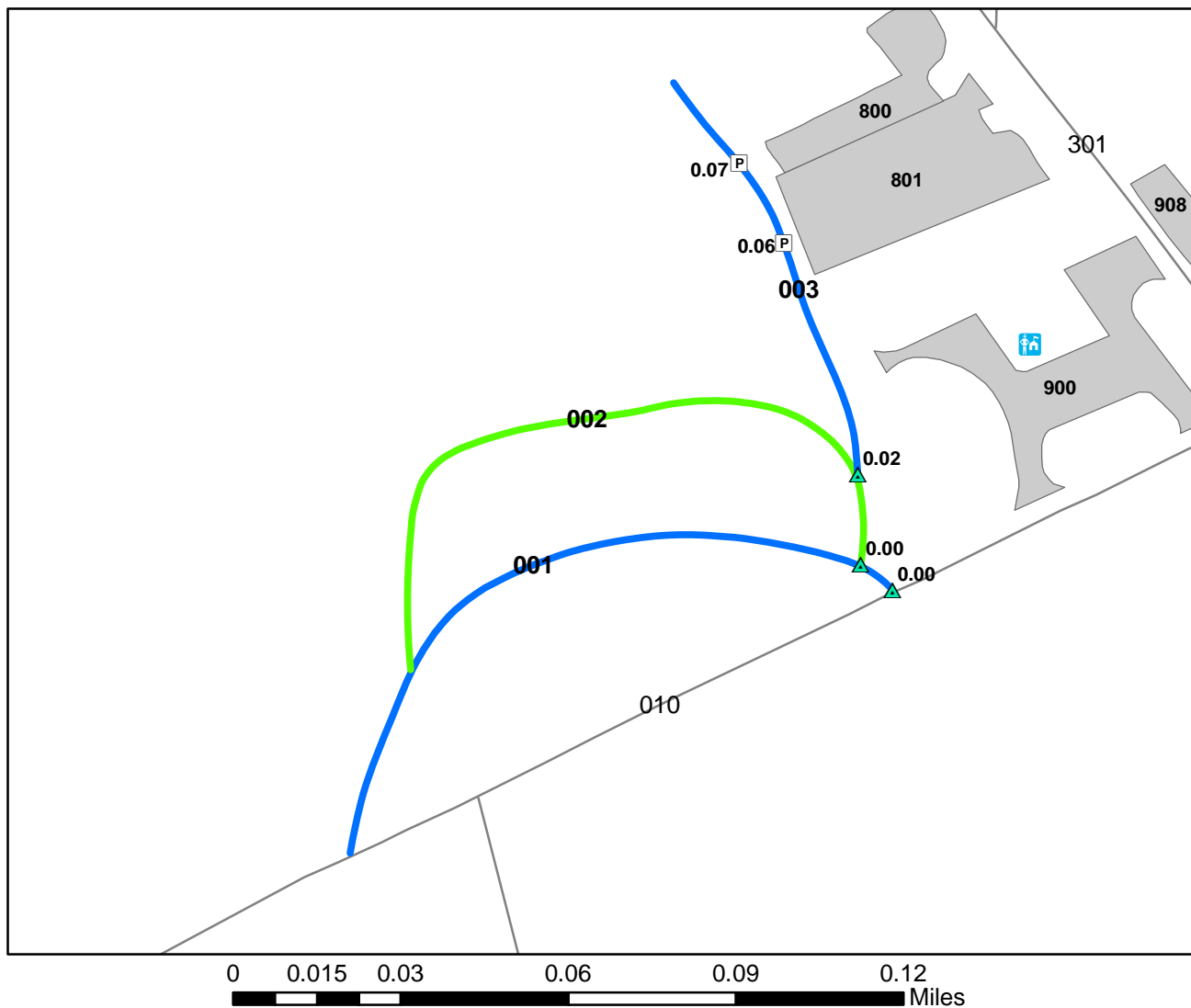


ROUTE: 105 Wyaskett Pond Loop TOTAL LENGTH: 2.08 Miles

ASSET:

RTE DESCRIPTION: From County Road to end of route

Section Number	001	002	003		
Section Length (miles)	0.23	0.99	0.24		
Inspection Date	4/28/2008	4/28/2008	7/20/2004		
Section Information					
Surface Type	Gravel	Gravel	Native		
Number of Lanes	1	1	1		
Roadway Width (feet)	12	12	12		
Roadway Condition Information					
Condition	Excellent	Excellent			
Remaining Service Life (years)	9	9			
Cost Estimate	\$0	\$0			
CRV	\$149600	\$641200			

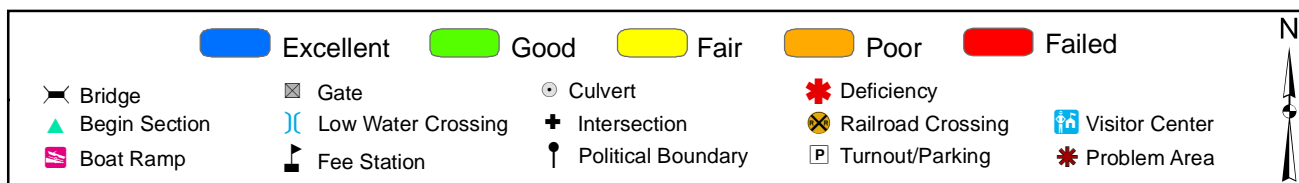
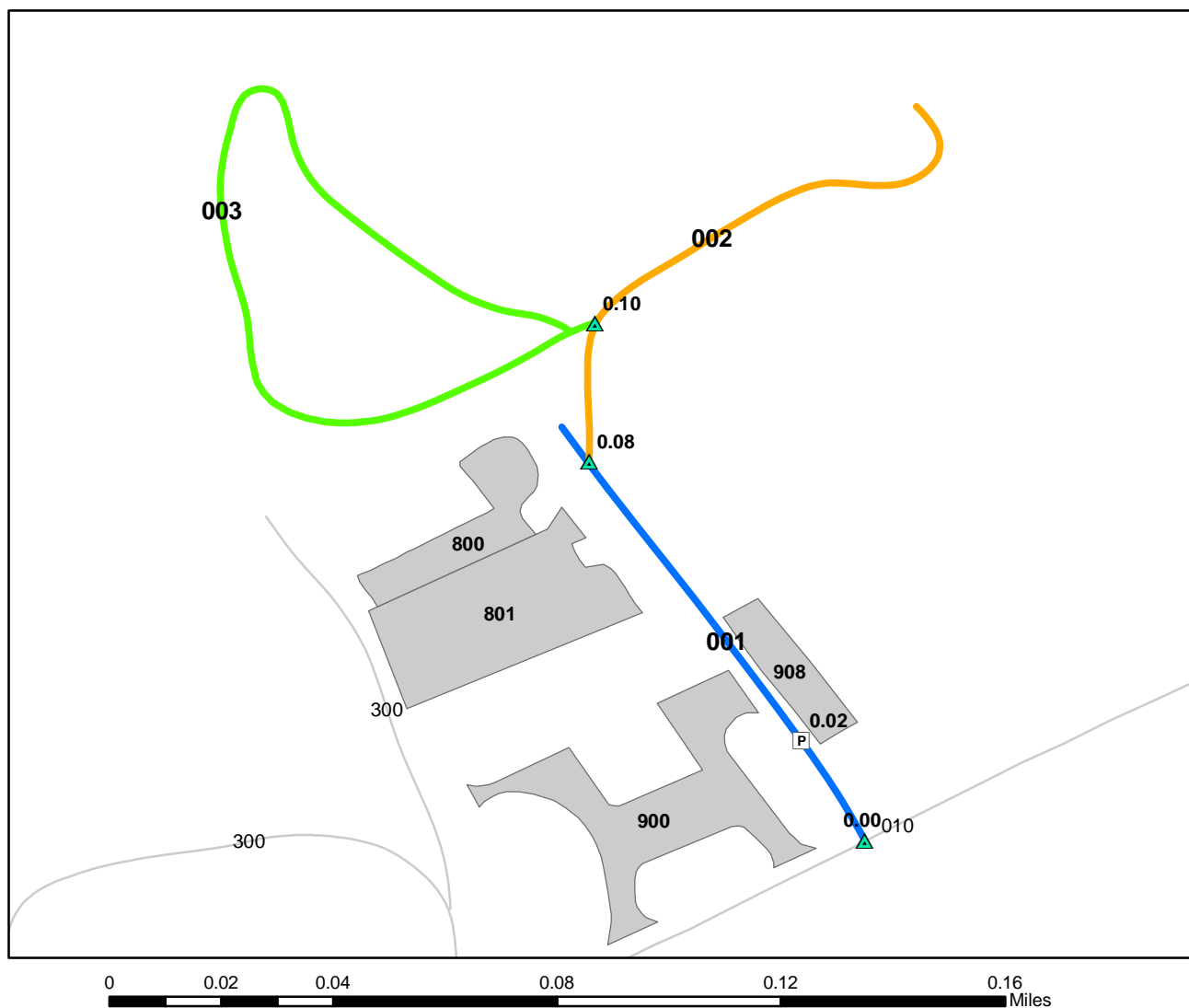


ROUTE: 300 Residential Driveway TOTAL LENGTH: 0.31 Miles

ASSET: 10035922

RTE DESCRIPTION: From Refuge Entrance/Hatchery Road (Route 010) to end of loop

Section Number	001	002	003		
Section Length (miles)	0.11	0.12	0.08		
Inspection Date	4/26/2008	4/26/2008	4/26/2008		
Section Information					
Surface Type	Gravel	Gravel	Gravel		
Number of Lanes	1	1	1		
Roadway Width (feet)	10	10	15		
Roadway Condition Information					
Condition	Excellent	Good	Excellent		
Remaining Service Life (years)	10	5	10		
Cost Estimate	\$0	\$200	\$0		
CRV	\$72900	\$77300	\$48800		

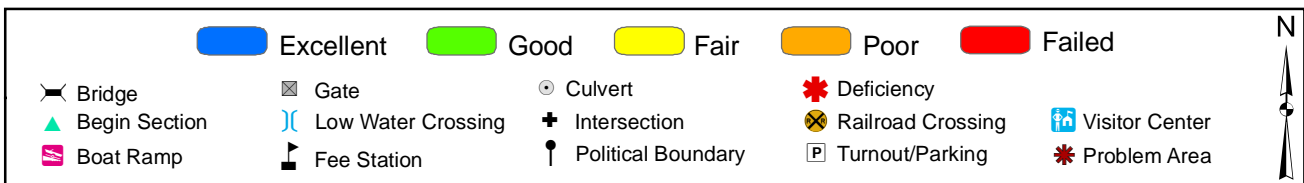
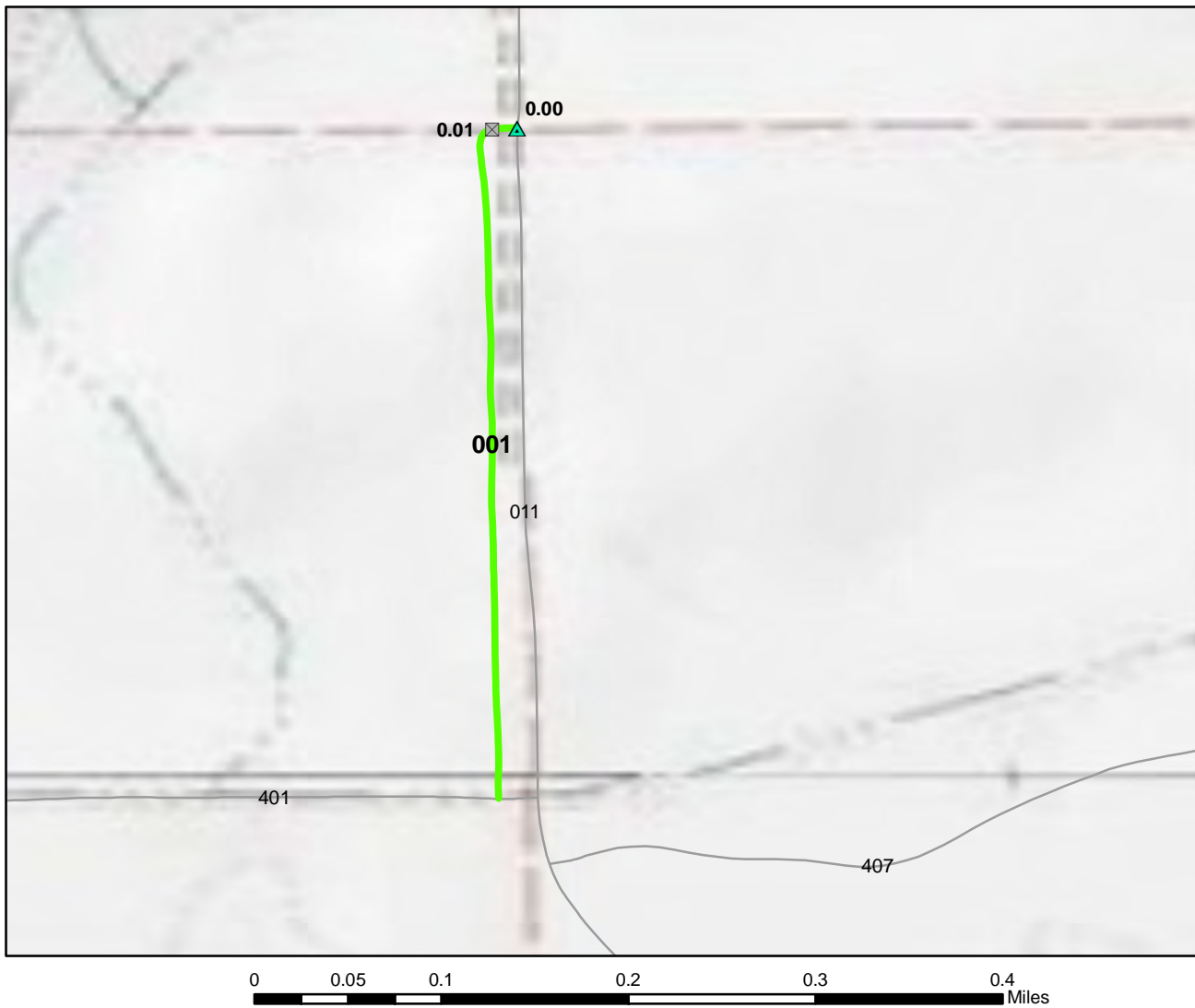


ROUTE: 301 Maintenance Area Driveway TOTAL LENGTH: 0.35 Miles

ASSET: 10035923

RTE DESCRIPTION: From Refuge Entrance/Hatchery Road (Route 010) to employee housing

Section Number	001	002	003		
Section Length (miles)	0.08	0.09	0.17		
Inspection Date	4/26/2008	4/26/2008	4/28/2008		
Section Information					
Surface Type	Gravel	Native	Native		
Number of Lanes	2	1	1		
Roadway Width (feet)	18	10	10		
Roadway Condition Information					
Condition	Excellent	Fair	Good		
Remaining Service Life (years)	8	3	7		
Cost Estimate	\$0	\$200	\$300		
CRV	\$54800	\$31200	\$58000		

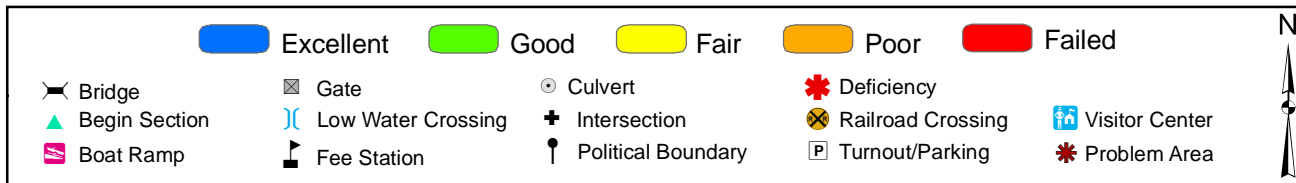
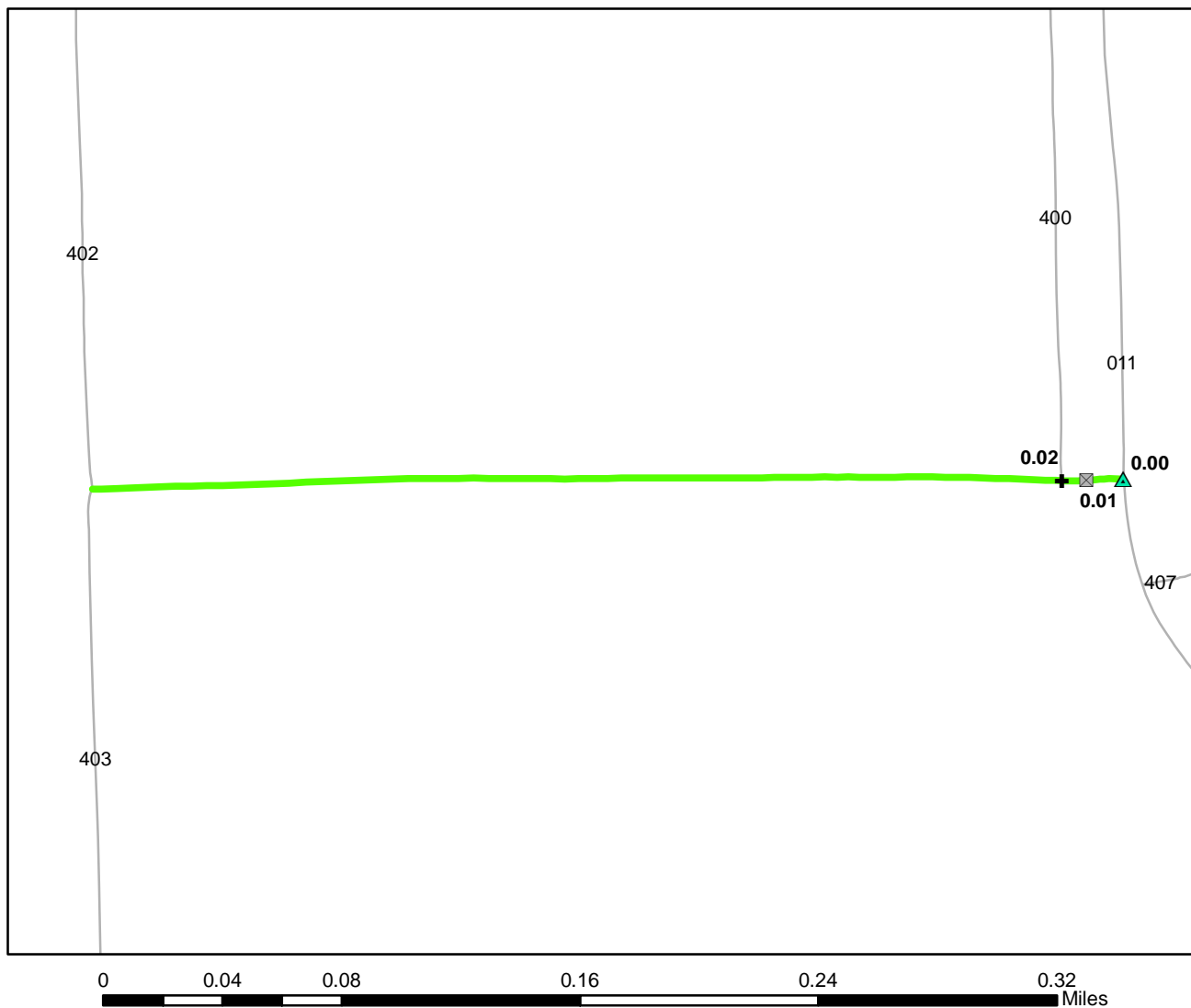


ROUTE: 400 Parker East Dike Road TOTAL LENGTH: 0.37 Miles

ASSET: 10034579

RTE DESCRIPTION: From Auto Tour Route (Route 011) to S4/Parker Dike Road (Route 401)

Section Number	001				
Section Length (miles)	0.37				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$600				
CRV	\$124200				

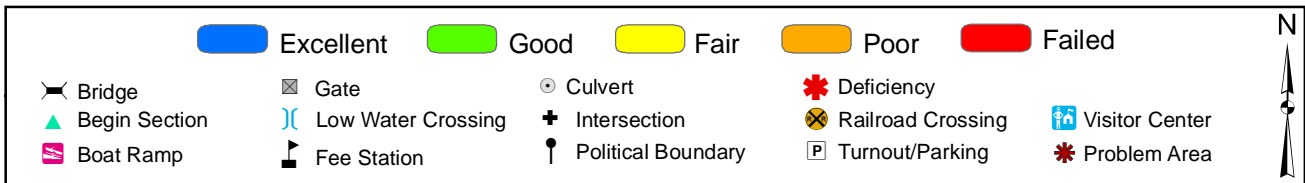


ROUTE: 401 S4/Parker Dike Road TOTAL LENGTH: 0.27 Miles

ASSET: 10035927

RTE DESCRIPTION: From Auto Tour Route (Route 011) to West Parker Dike Road (Route 402)

Section Number	001				
Section Length (miles)	0.27				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$400				
CRV	\$89000				

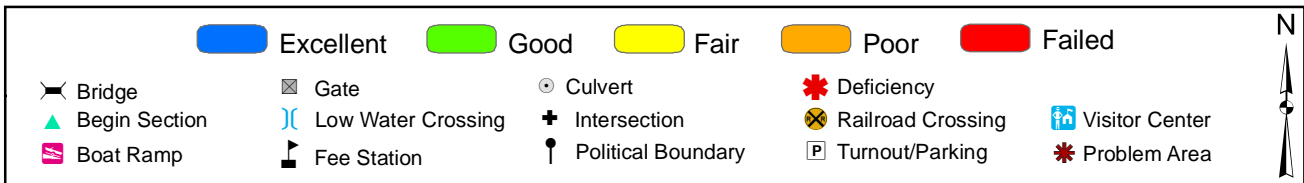
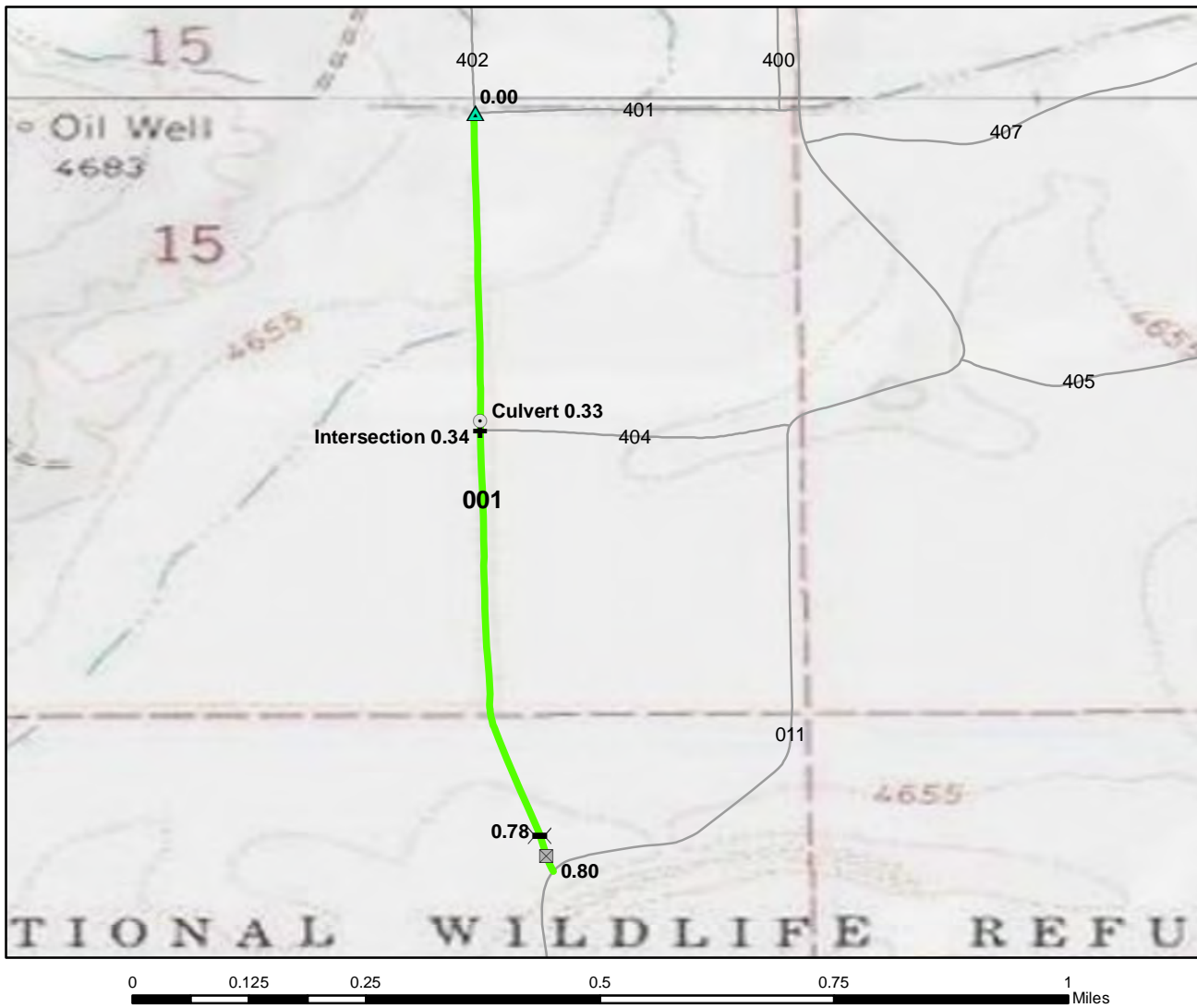


ROUTE: 402 West Parker Dike Road TOTAL LENGTH: 0.32 Miles

ASSET: 10035926

RTE DESCRIPTION: From S3/S5 Dike Road (Route 403) to end of route

Section Number	001				
Section Length (miles)	0.32				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$500				
CRV	\$107200				

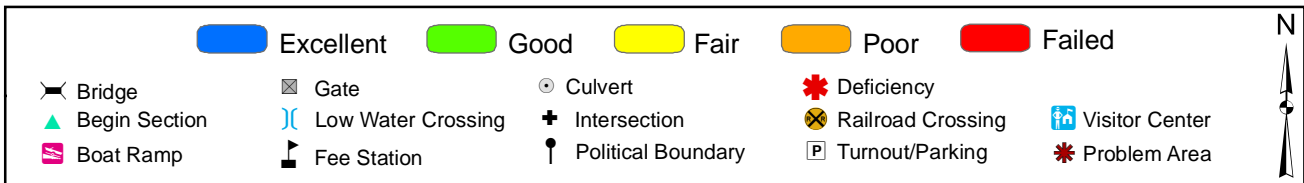
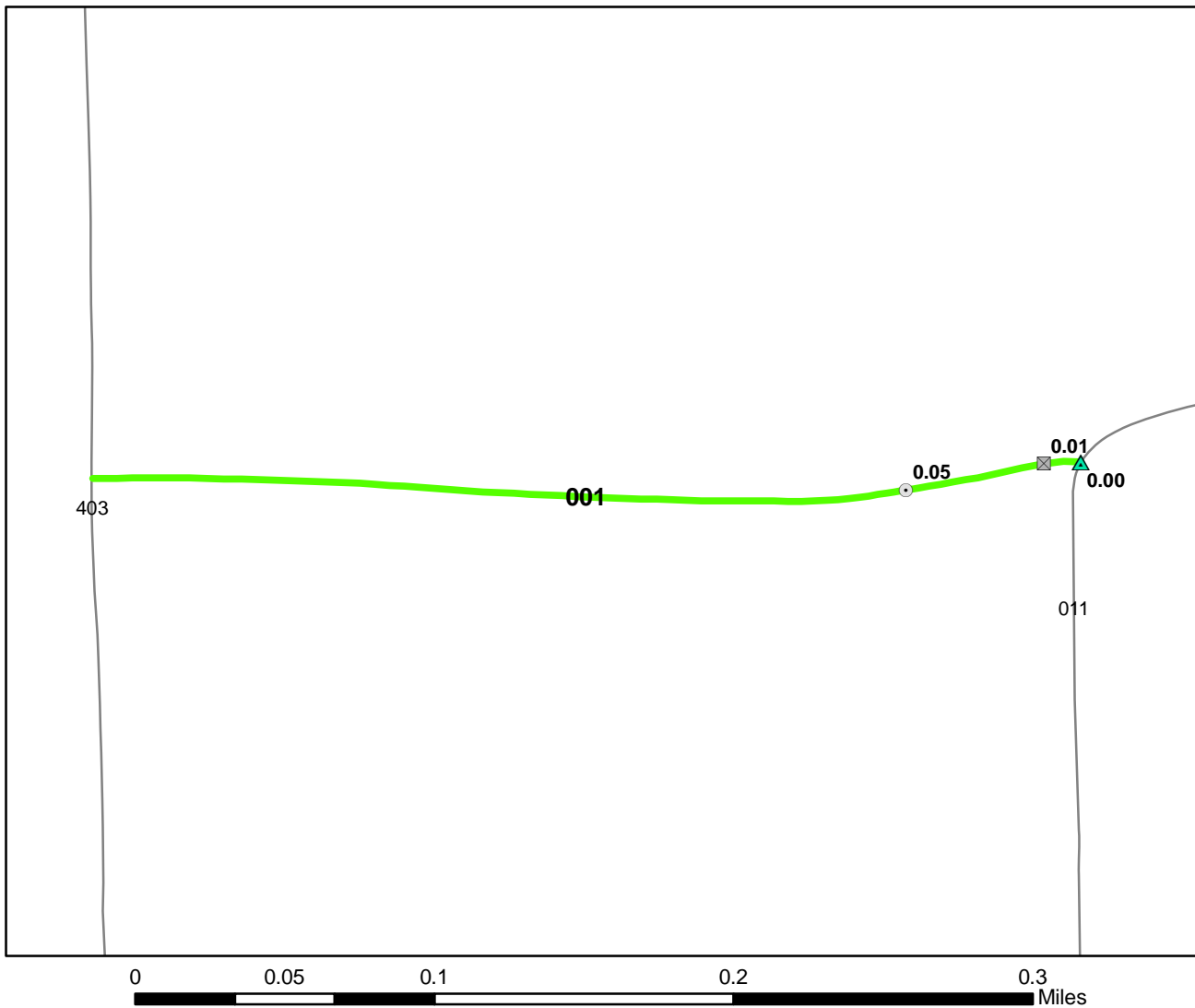


ROUTE: 403 S3/S5 Dike Road TOTAL LENGTH: 0.82 Miles

ASSET: 10035928

RTE DESCRIPTION: From West Parker Dike Road (Route 402) to Auto Tour Loop (Route 011)

Section Number	001				
Section Length (miles)	0.82				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$1300				
CRV	\$274100				

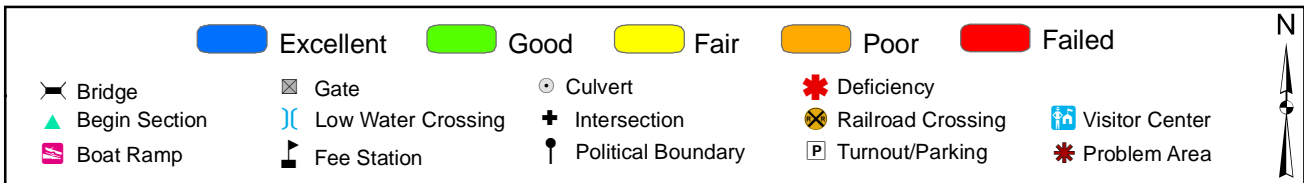
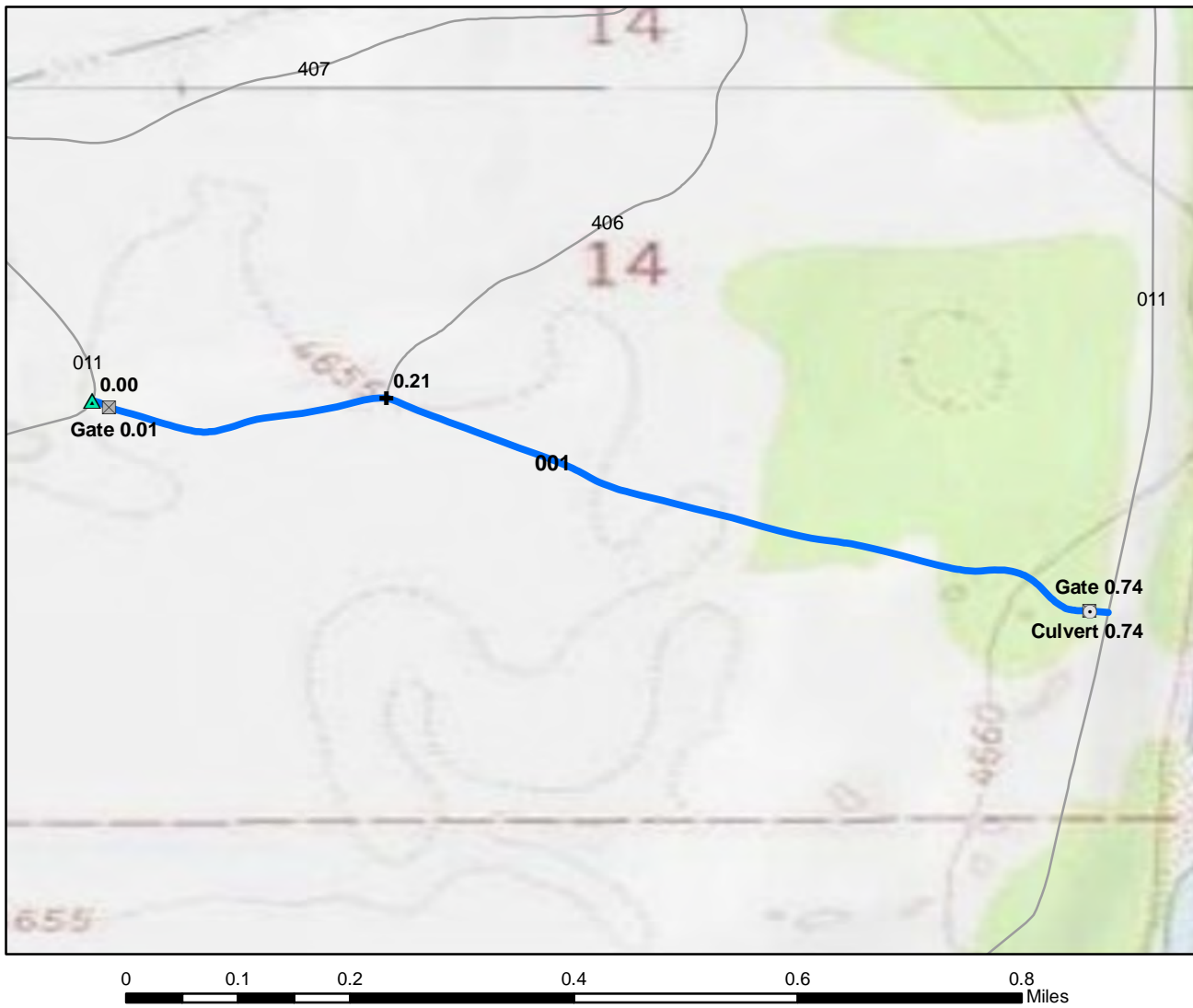


ROUTE: 404 S3/S4 Dike Road TOTAL LENGTH: 0.25 Miles

ASSET: 10046005

RTE DESCRIPTION: From Auto Tour Route (Route 011) to S3/S5 Dike Road (Route 403)

Section Number	001				
Section Length (miles)	0.25				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$400				
CRV	\$85500				

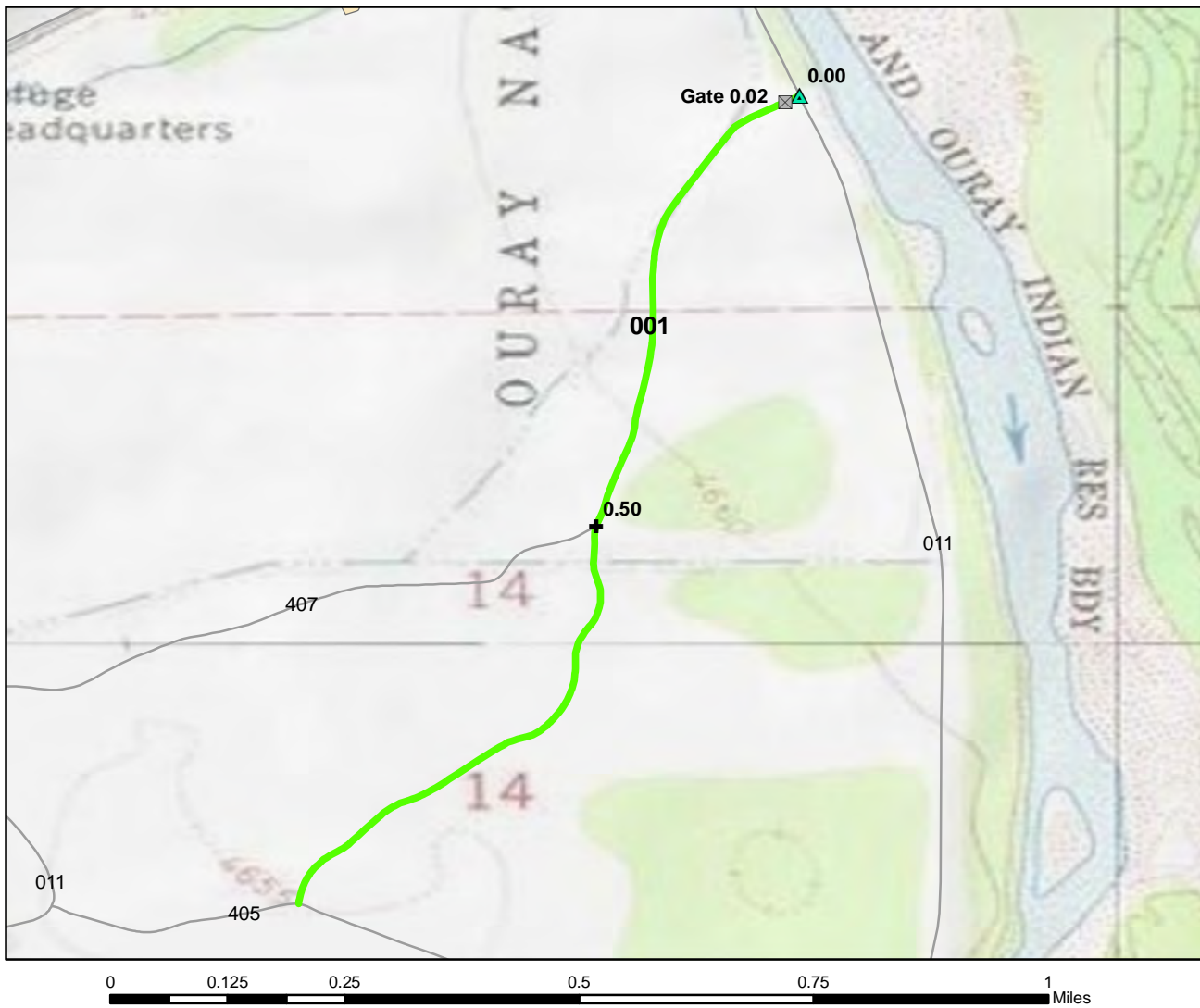





















ROUTE: 405 S1/S2 Dike Road TOTAL LENGTH: 0.75 Miles

ASSET: 10034606

RTE DESCRIPTION: From Auto Tour Route (Route 011) to Auto Tour Route (Route 011)

Section Number	001				
Section Length (miles)	0.75				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Excellent				
Remaining Service Life (years)	10				
Cost Estimate	\$0				
CRV	\$251700				



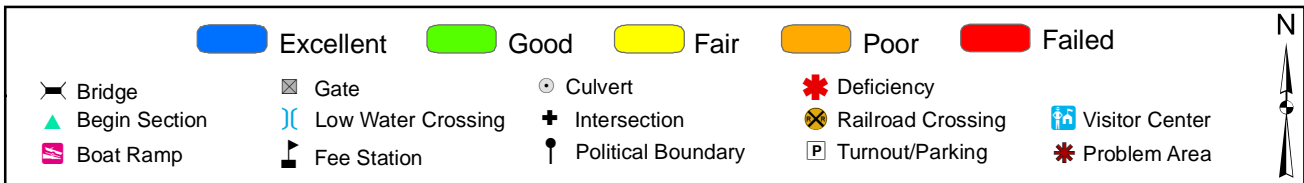
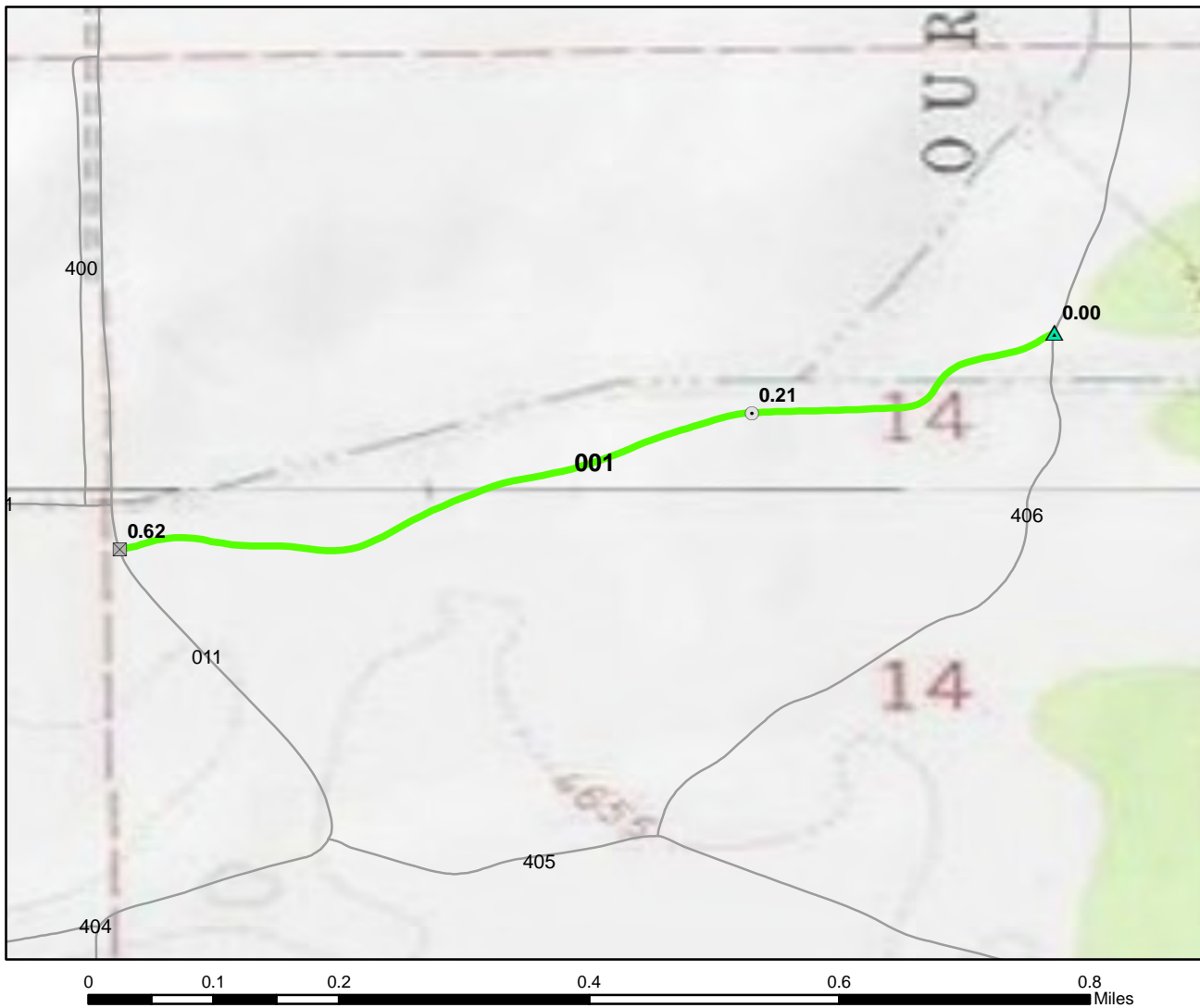
	Excellent		Good		Fair		Poor		Failed
	Bridge		Gate		Culvert		Deficiency		Railroad Crossing
	Begin Section		Low Water Crossing		Intersection		Visitor Center		Turnout/Parking
	Boat Ramp		Fee Station		Political Boundary		Problem Area		

ROUTE: 406 S1/S1A Service Road TOTAL LENGTH: 1.02 Miles

ASSET: 10034607

RTE DESCRIPTION: From Auto Tour Route (Route 011) to S1/S2 Dike Road (Route 405)

Section Number	001				
Section Length (miles)	1.02				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	12				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$1600				
CRV	\$341800				

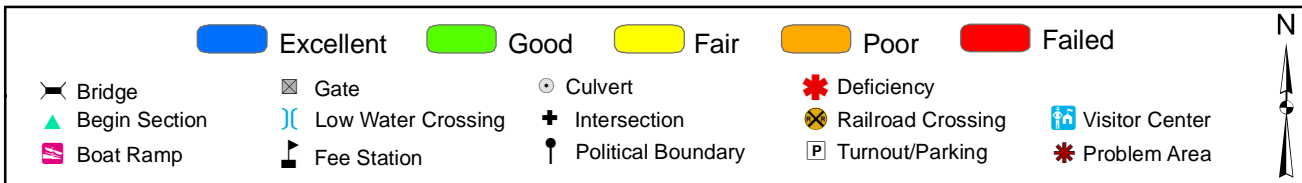
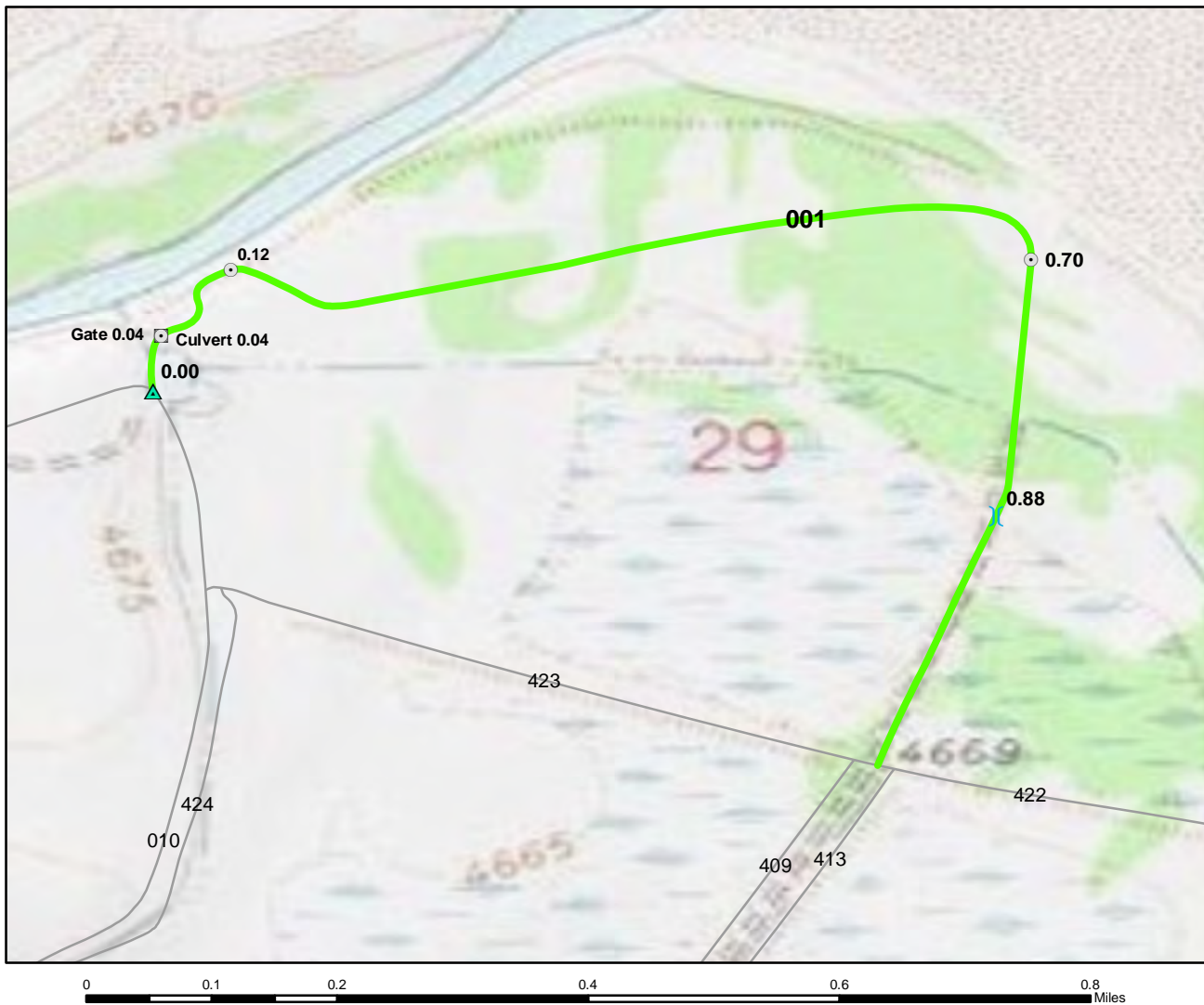


ROUTE: 407 S1/S1A Dike Road TOTAL LENGTH: 0.62 Miles

ASSET: 10035914

RTE DESCRIPTION: From S1/S1A Service Road (Route 406) to Auto Tour Route (Route 011)

Section Number	001				
Section Length (miles)	0.62				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	12				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$1000				
CRV	\$208700				

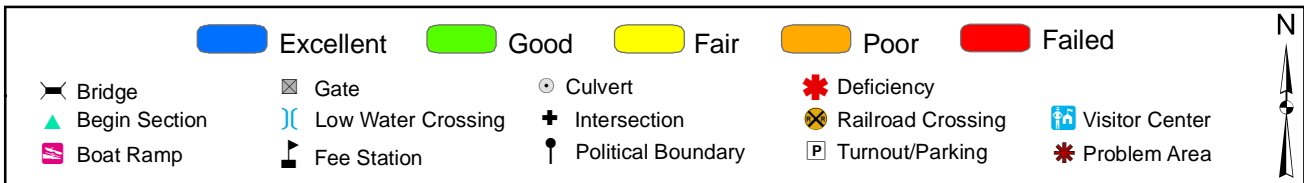
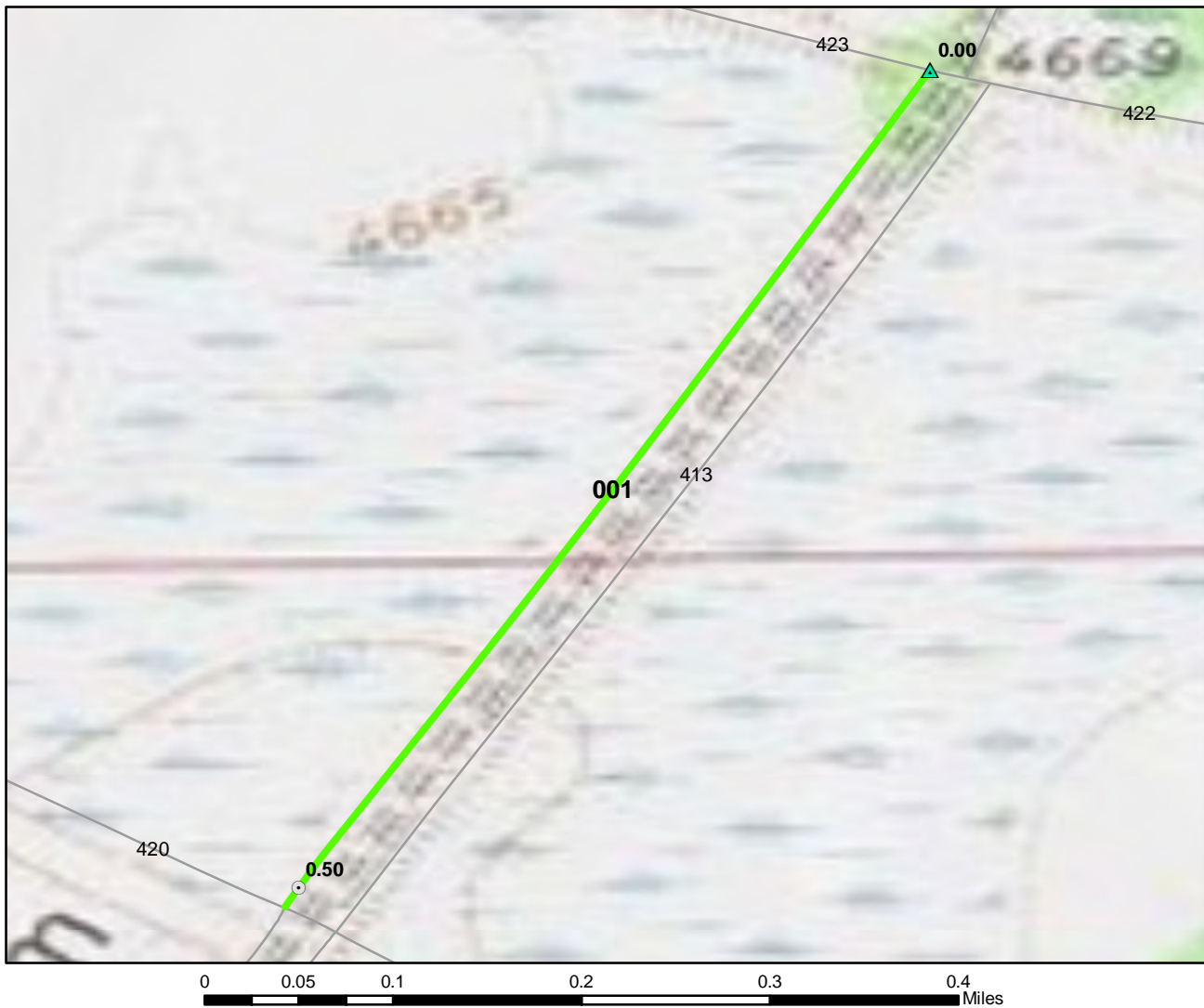


ROUTE: 408 L1/L2 Main Leota Road TOTAL LENGTH: 1.07 Miles

ASSET: 10034485

RTE DESCRIPTION: From Refuge Entrance/Hatchery Road (Route 010) to L1/L3 Dike Road (Route 424)

Section Number	001				
Section Length (miles)	1.07				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$1700				
CRV	\$358500				

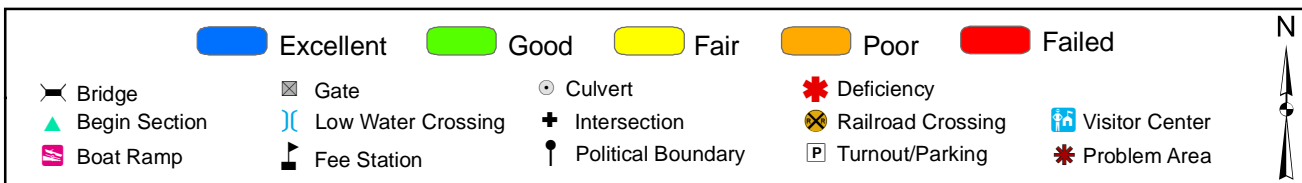


ROUTE: 409 L4 East Dike Road TOTAL LENGTH: 0.52 Miles

ASSET: 10040033

RTE DESCRIPTION: From L2/L4 Dike Road (Route 425) to L4/L6 Dike Road (Route 421)

Section Number	001				
Section Length (miles)	0.52				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$800				
CRV	\$173000				

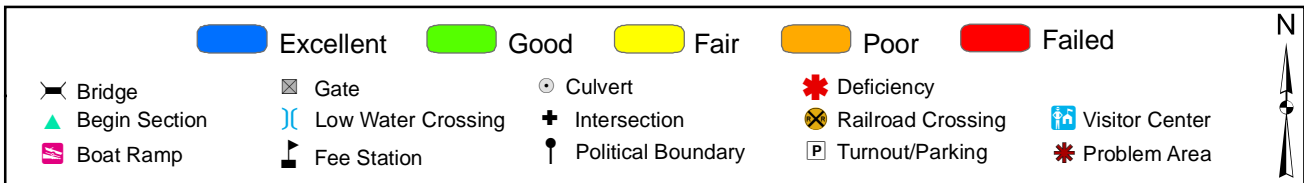
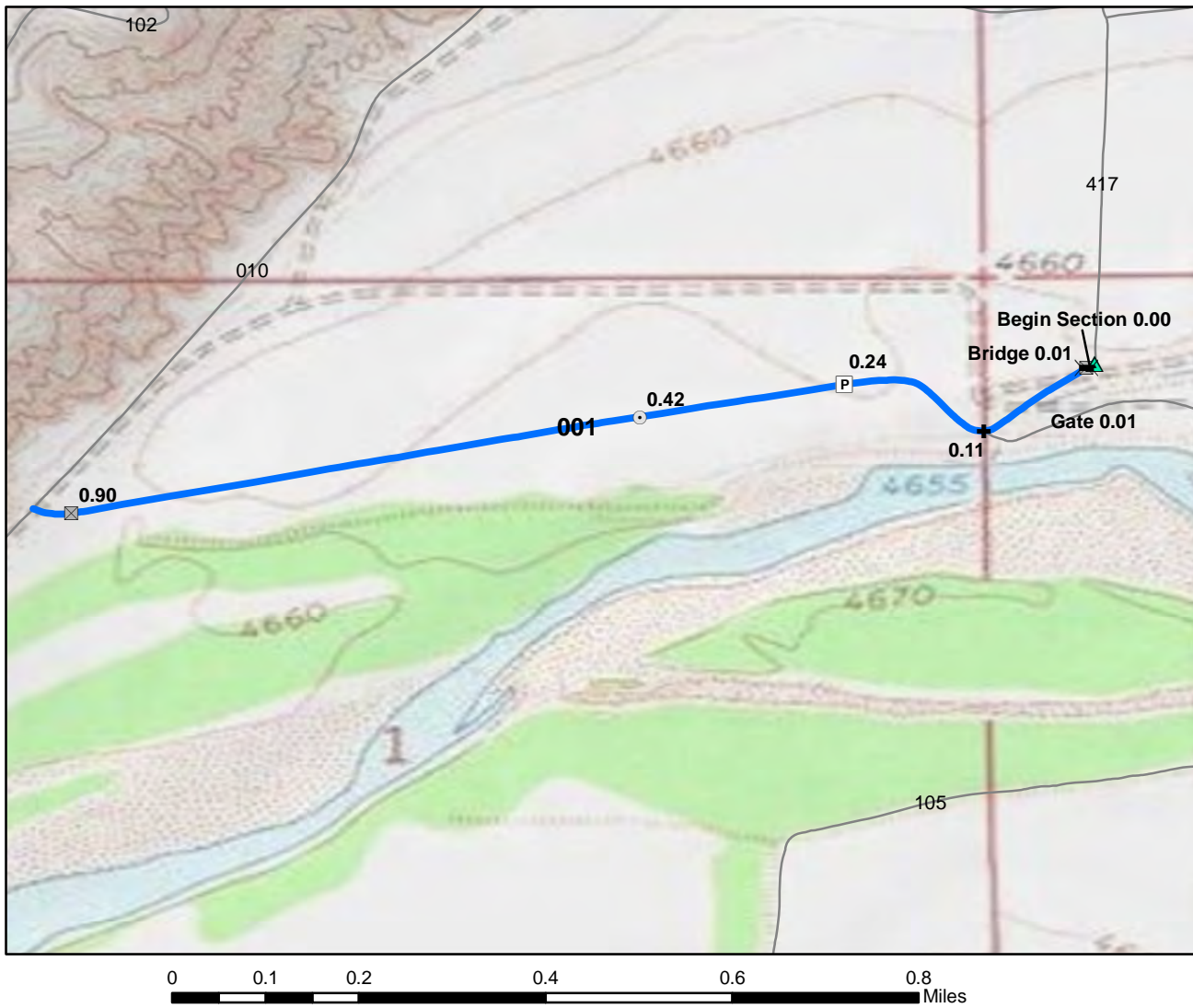


ROUTE: 410 L6 East Dike Road TOTAL LENGTH: 0.45 Miles

ASSET: 10040036

RTE DESCRIPTION: From L4/L6 Dike Road (Route 421) to L6/L8 Dike Road (Route 419)

Section Number	001				
Section Length (miles)	0.45				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$700				
CRV	\$152700				

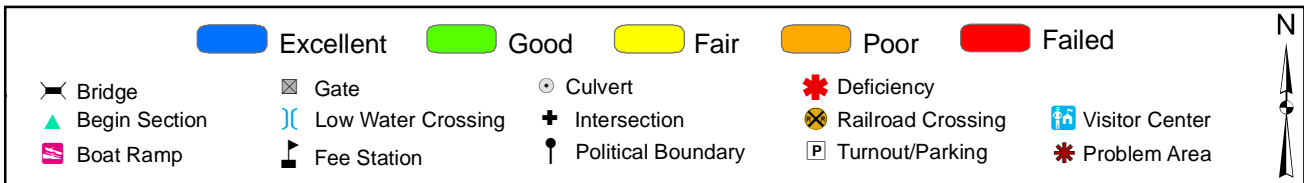
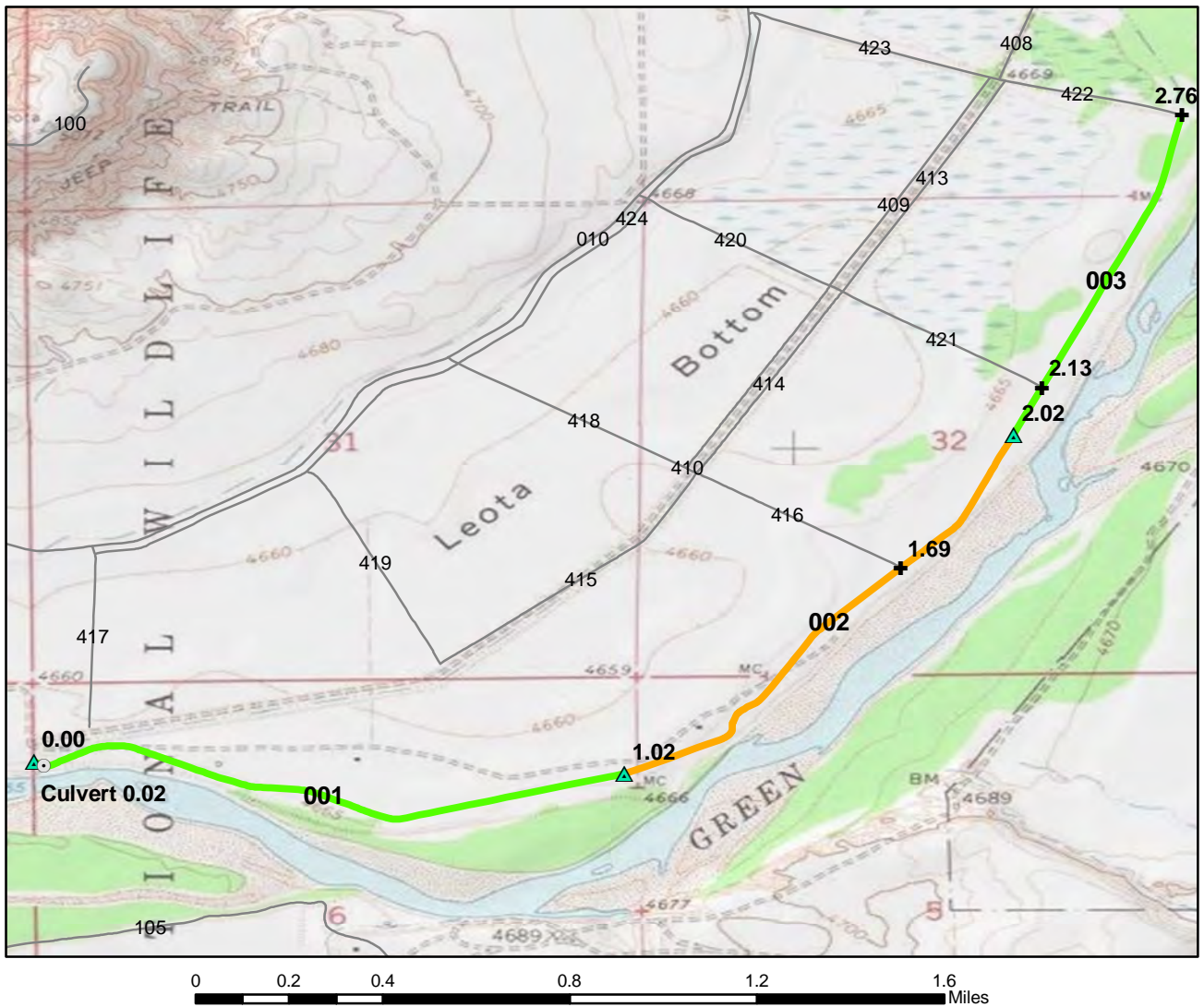


ROUTE: 411 L10/River Dike Road TOTAL LENGTH: 0.94 Miles

ASSET: 10034495

RTE DESCRIPTION: From L9/L10 Dike Road (Route 418) to Leota Bottoms Parking (Route 902)

Section Number	001				
Section Length (miles)	0.94				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	12				
Roadway Condition Information					
Condition	Excellent				
Remaining Service Life (years)	10				
Cost Estimate	\$0				
CRV	\$314000				

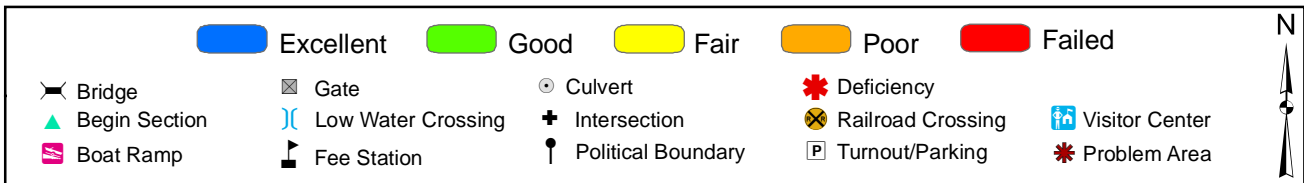
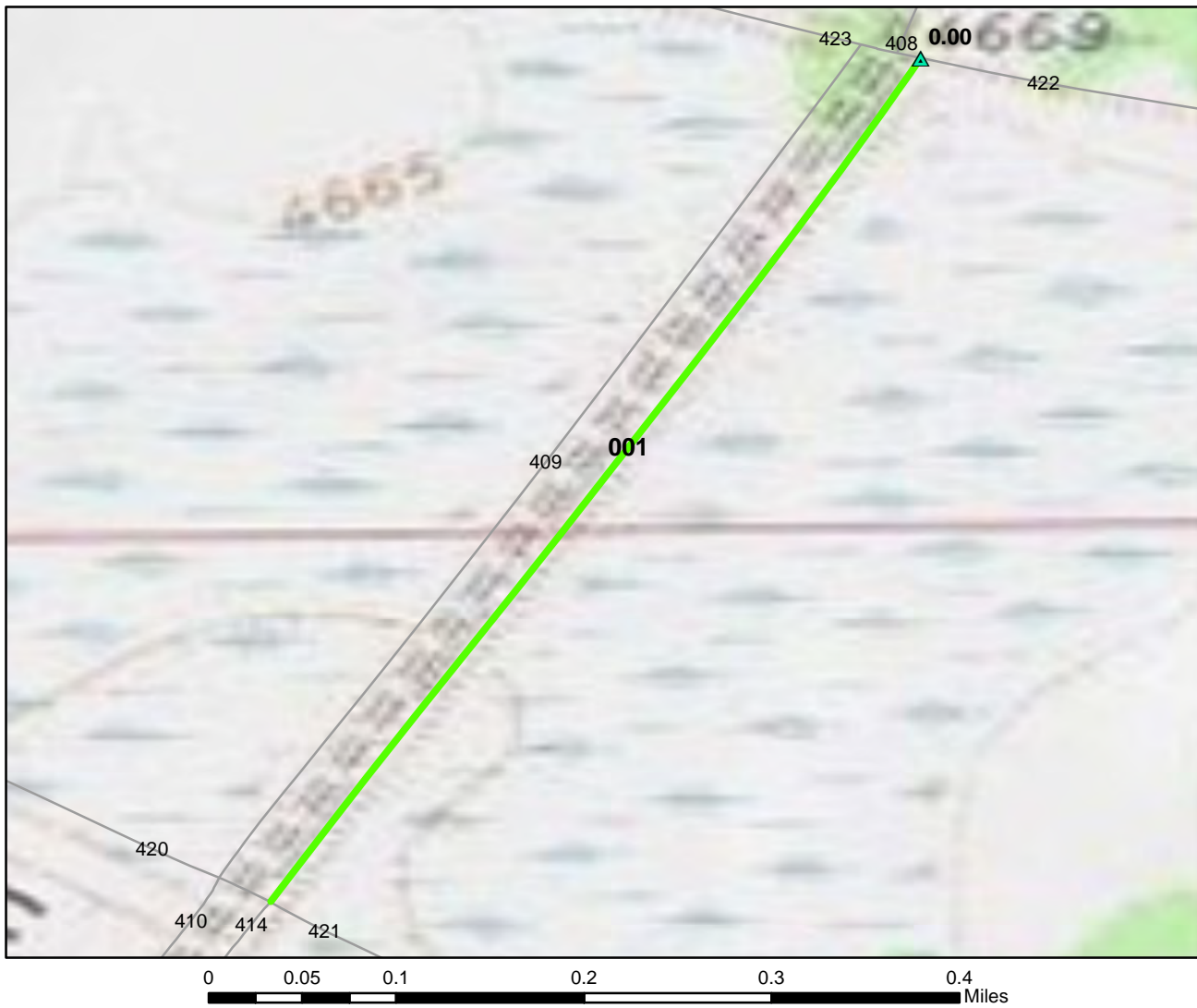


ROUTE: 412 L7/L3 Leota Riverside Dike Road TOTAL LENGTH: 2.76 Miles

ASSET: 10034496

RTE DESCRIPTION: From L10/River Dike Road (Route 412) to L1/L3 Dike Road (Route 424)

Section Number	001	002	003		
Section Length (miles)	1.02	1.00	0.74		
Inspection Date	4/28/2008	4/28/2008	4/28/2008		
Section Information					
Surface Type	Native	Native	Native		
Number of Lanes	1	1	1		
Roadway Width (feet)	10	10	10		
Roadway Condition Information					
Condition	Good	Poor	Good		
Remaining Service Life (years)	7	2	7		
Cost Estimate	\$1700	\$29400	\$1200		
CRV	\$343300	\$334500	\$247900		

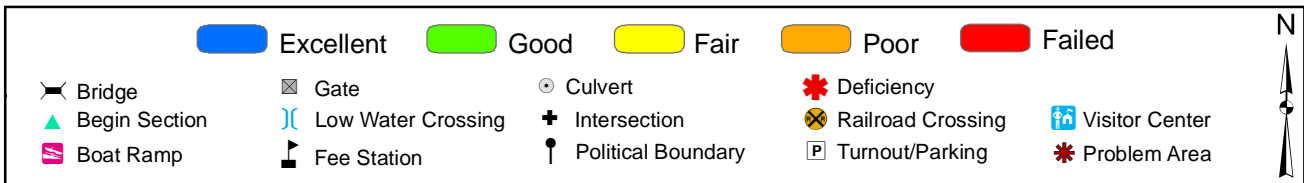


ROUTE: 413 L3 West Dike Road TOTAL LENGTH: 0.52 Miles

ASSET: 10039985

RTE DESCRIPTION: From L1/L3 Dike Road (Route 424) to L3/L5 Dike Road (Route 423)

Section Number	001				
Section Length (miles)	0.52				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$800				
CRV	\$175300				

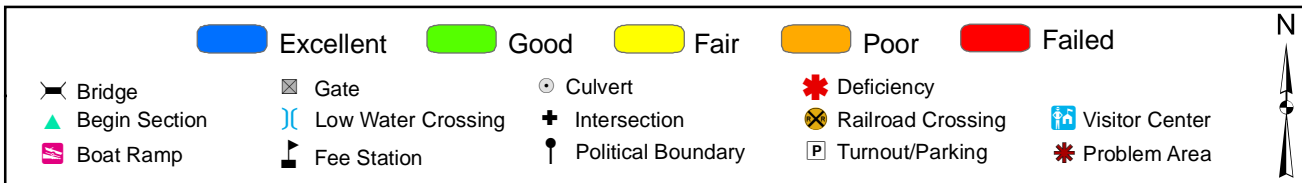


ROUTE: 414 L5 West Dike Road TOTAL LENGTH: 0.45 Miles

ASSET: 10040034

RTE DESCRIPTION: From L3/L5 Dike Road (Route 423) to L5/L7 Dike Road (Route 417)

Section Number	001				
Section Length (miles)	0.45				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$700				
CRV	\$152600				

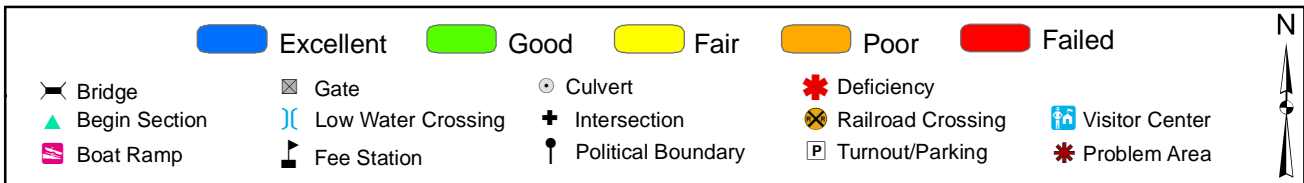


ROUTE: 415 L7 West Dike Road TOTAL LENGTH: 0.59 Miles

ASSET: 10040040

RTE DESCRIPTION: From L5/L7 Dike Road (Route 417) to L8/L9 Dike Road (Route 420)

Section Number	001				
Section Length (miles)	0.59				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$1000				
CRV	\$199000				

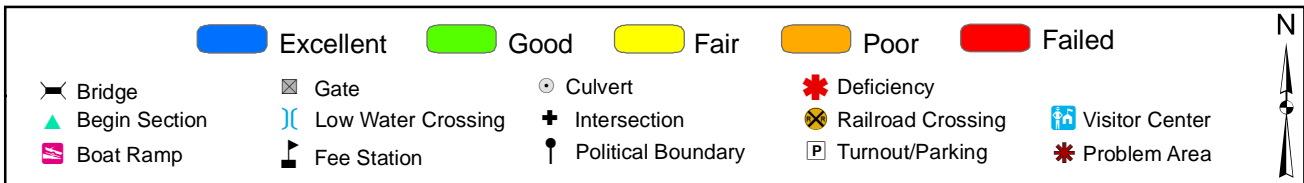


ROUTE: 416 L5/L7 Dike Road TOTAL LENGTH: 0.41 Miles

ASSET: 10034490

RTE DESCRIPTION: From L6/L8 Dike Road (Route 419) to L7/L3 Leota Riverside Dike Road (Route 413)

Section Number	001				
Section Length (miles)	0.41				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$700				
CRV	\$137400				

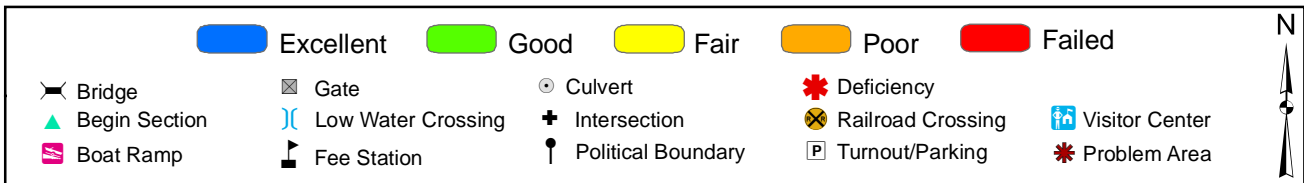


ROUTE: 417 L9/L10 Dike Road TOTAL LENGTH: 0.39 Miles

ASSET: 10034494

RTE DESCRIPTION: From L10/River Dike Road (Route 412) to Refuge Entrance/Hatchery Road (Route 010)

Section Number	001				
Section Length (miles)	0.39				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	10				
Roadway Condition Information					
Condition	Fair				
Remaining Service Life (years)	4				
Cost Estimate	\$800				
CRV	\$129700				

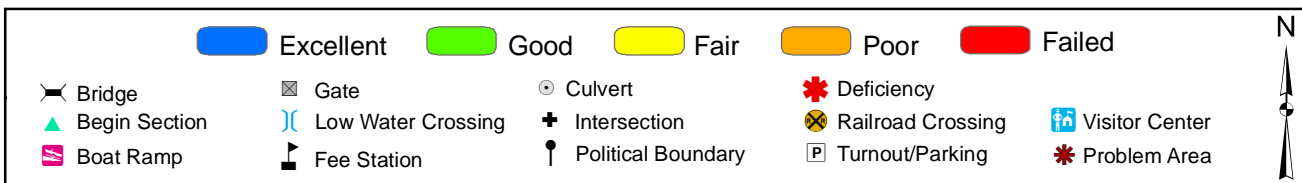


ROUTE: 418 L6/L8 Dike Road TOTAL LENGTH: 0.46 Miles

ASSET: 10034491

RTE DESCRIPTION: From Refuge Entrance/Hatchery Road (Route 010) to L5/L7 Dike Road (Route 417)

Section Number	001				
Section Length (miles)	0.46				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	12				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$700				
CRV	\$153500				

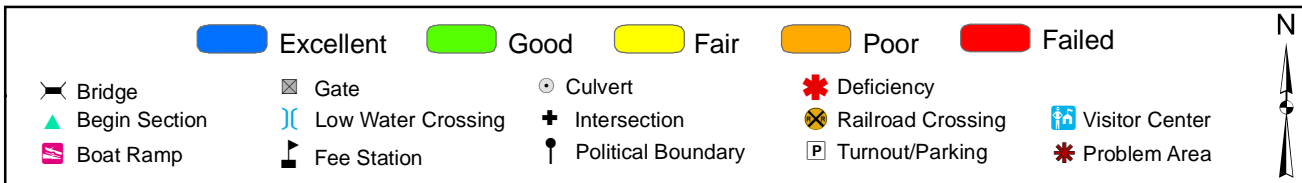


ROUTE: 419 L8/L9 Dike Road TOTAL LENGTH: 0.47 Miles

ASSET: 10034493

RTE DESCRIPTION: From L7 West Dike Road (Route 416) to Leota North Service Road (Route 426)

Section Number	001				
Section Length (miles)	0.47				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	14				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	7				
Cost Estimate	\$800				
CRV	\$157000				



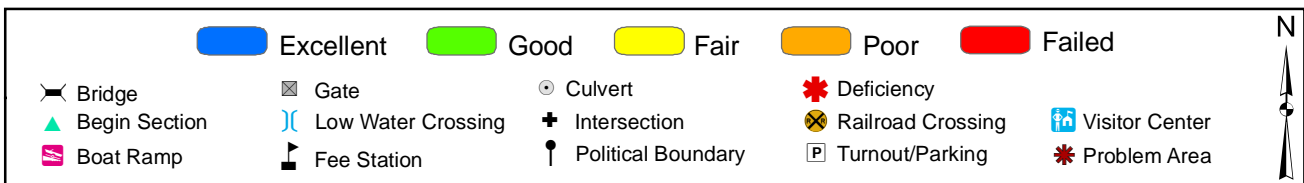
ROUTE: 420 L4/L6 Dike Road

TOTAL LENGTH: 0.39 Miles

ASSET: 10034489

RTE DESCRIPTION: From Refuge Entrance/Hatchery Road (Route 010) to L3/L5 Dike Road (Route 423)

Section Number	001				
Section Length (miles)	0.39				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	12				
Roadway Condition Information					
Condition	Excellent				
Remaining Service Life (years)	10				
Cost Estimate	\$0				
CRV	\$131600				

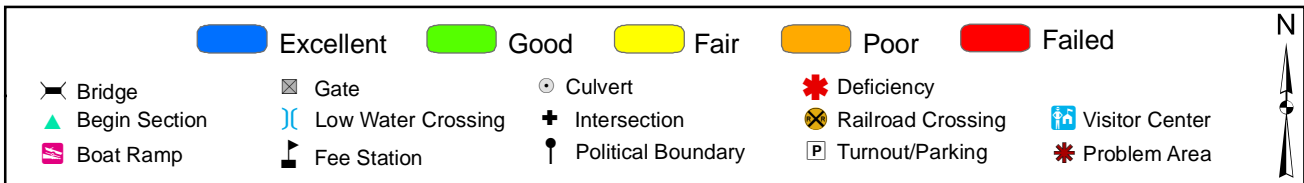


ROUTE: 421 L3/L5 Dike Road TOTAL LENGTH: 0.38 Miles

ASSET: 10034488

RTE DESCRIPTION: From L4/L6 Dike Road (Route 421) to L7/L3 Leota Riverside Dike Road (Route 413)

Section Number	001				
Section Length (miles)	0.38				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Native				
Number of Lanes	1				
Roadway Width (feet)	12				
Roadway Condition Information					
Condition	Good				
Remaining Service Life (years)	5				
Cost Estimate	\$600				
CRV	\$129100				

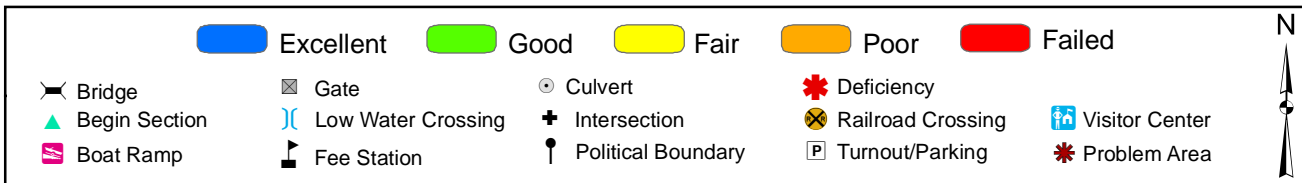
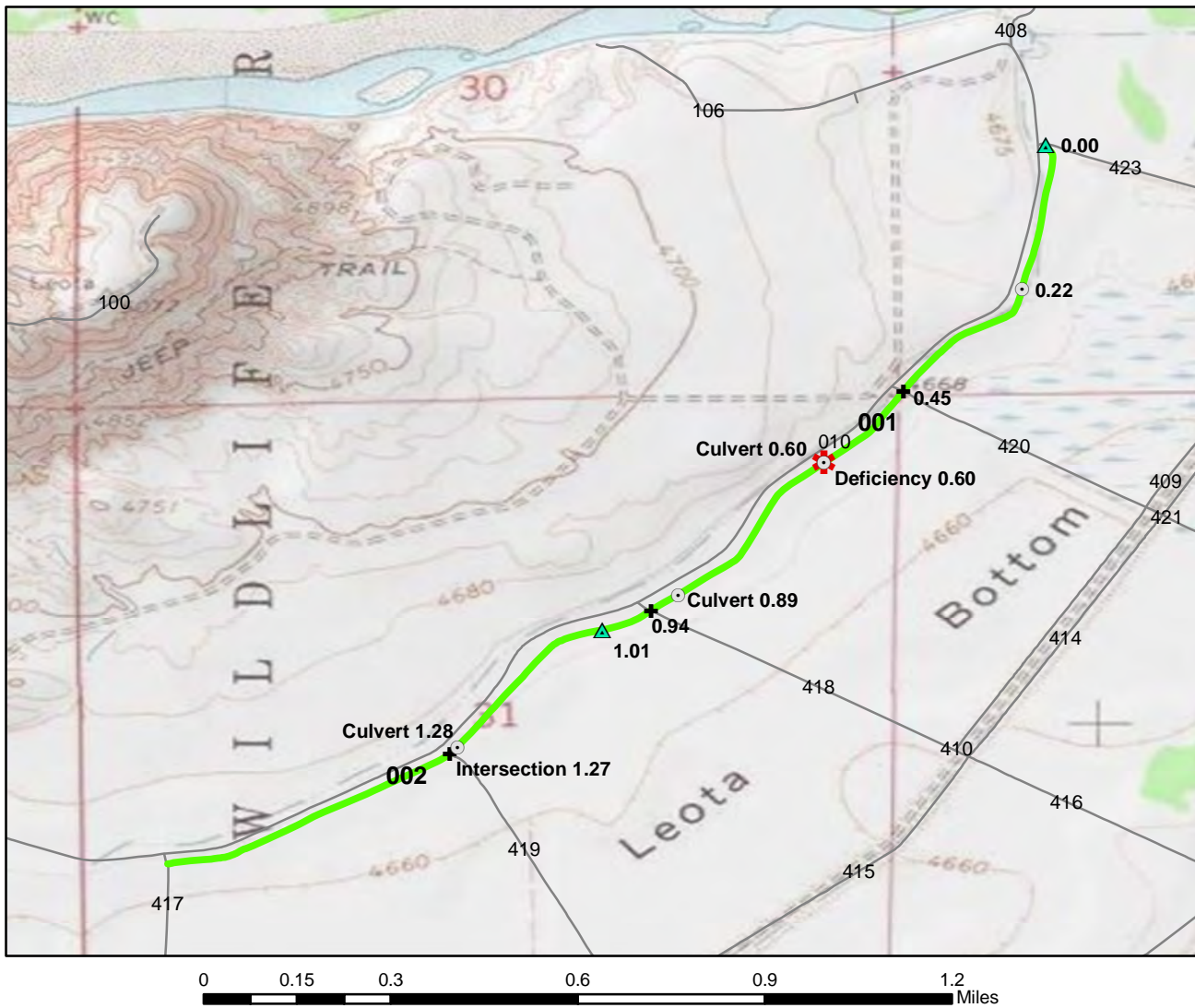


ROUTE: 422 L1/L3 Dike Road TOTAL LENGTH: 0.32 Miles

ASSET: 10034486

RTE DESCRIPTION: From L7/L3 Leota Riverside Dike Road (Route 413) to L2/L4 Dike Road (Route 425)

Section Number	001				
Section Length (miles)	0.32				
Inspection Date	4/28/2008				
Section Information					
Surface Type	Gravel				
Number of Lanes	1				
Roadway Width (feet)	12				
Roadway Condition Information					
Condition	Excellent				
Remaining Service Life (years)	10				
Cost Estimate	\$0				
CRV	\$205800				



ROUTE: 424 Leota North Service Road TOTAL LENGTH: 1.69 Miles

ASSET: 10036035

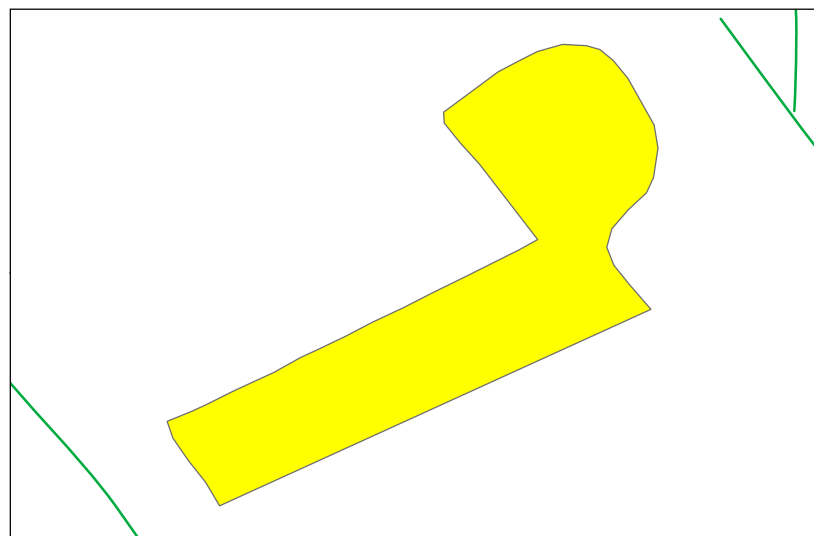
RTE DESCRIPTION: From L2/L4 Dike Road (Route 425) to L9/L10 Dike Road (Route 418)

Section Number	001	002			
Section Length (miles)	1.01	0.68			
Inspection Date	4/28/2008	4/28/2008			
Section Information					
Surface Type	Native	Native			
Number of Lanes	1	1			
Roadway Width (feet)	14	14			
Roadway Condition Information					
Condition	Good	Good			
Remaining Service Life (years)	7	7			
Cost Estimate	\$1600	\$1100			
CRV	\$339400	\$226800			

Ouray

Route 800: Shop Gravel Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10036044	4/28/2008	Gravel	6622	Fair	\$1600



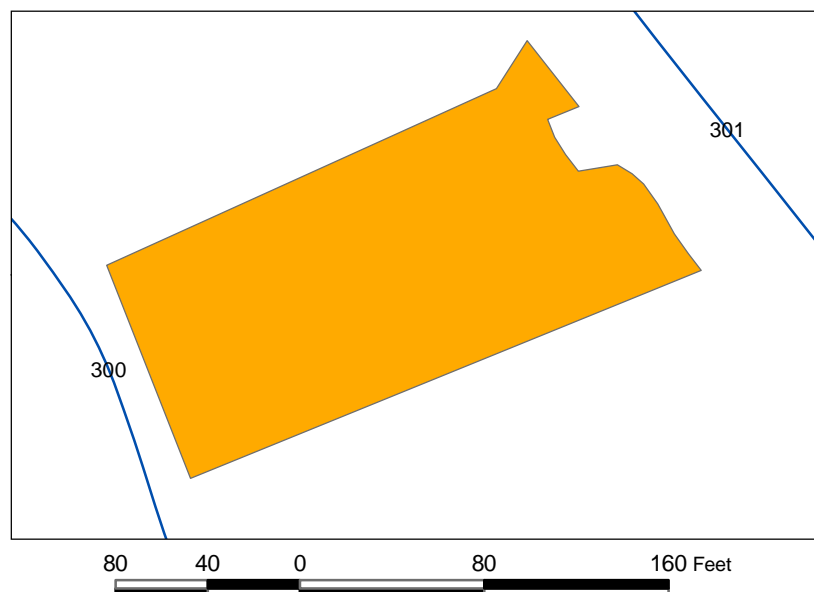
80 40 0 80 160 Feet



Ouray

Route 801: Shop Asphalt Parking

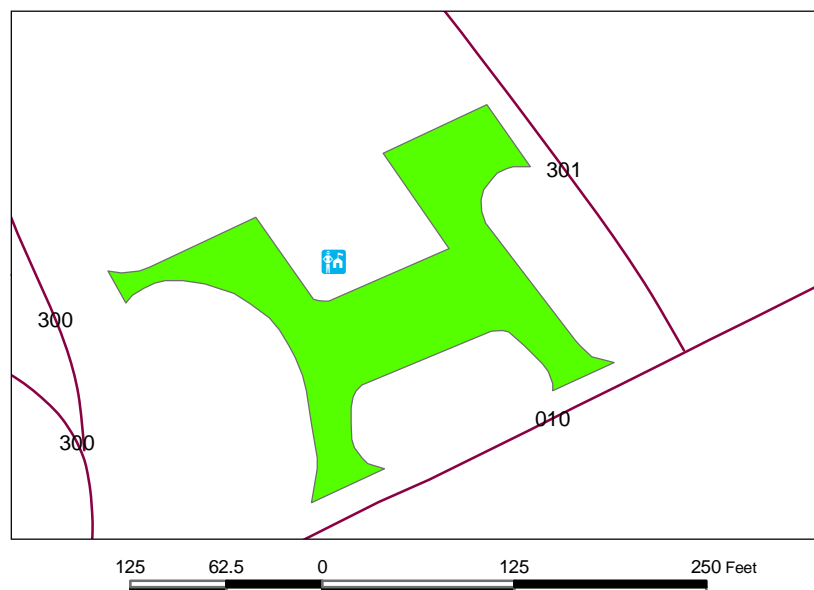
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10034474	4/26/2008	Asphalt	17691	Poor	\$79700



Ouray

Route 900: Office Parking

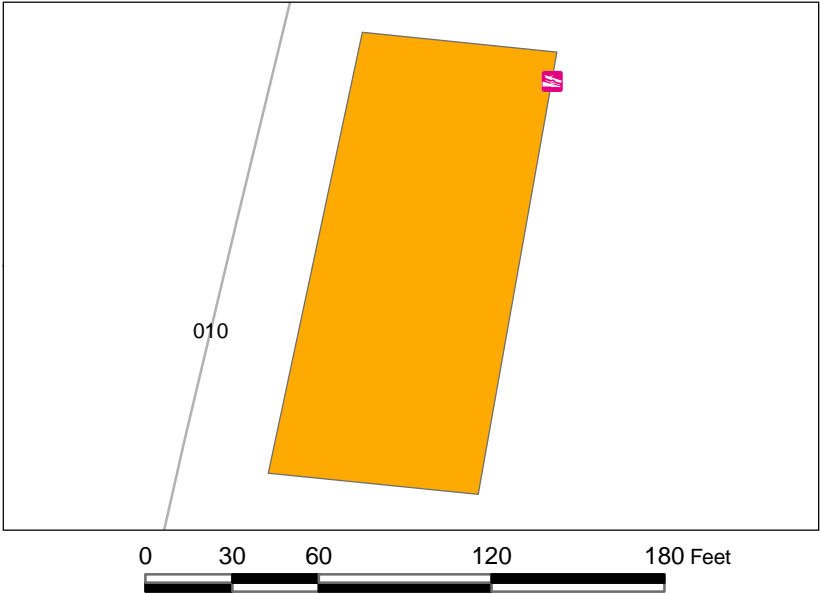
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10034597	4/26/2008	Asphalt	15451	Good	\$2700



Ouray

Route 901: Boat Ramp Parking

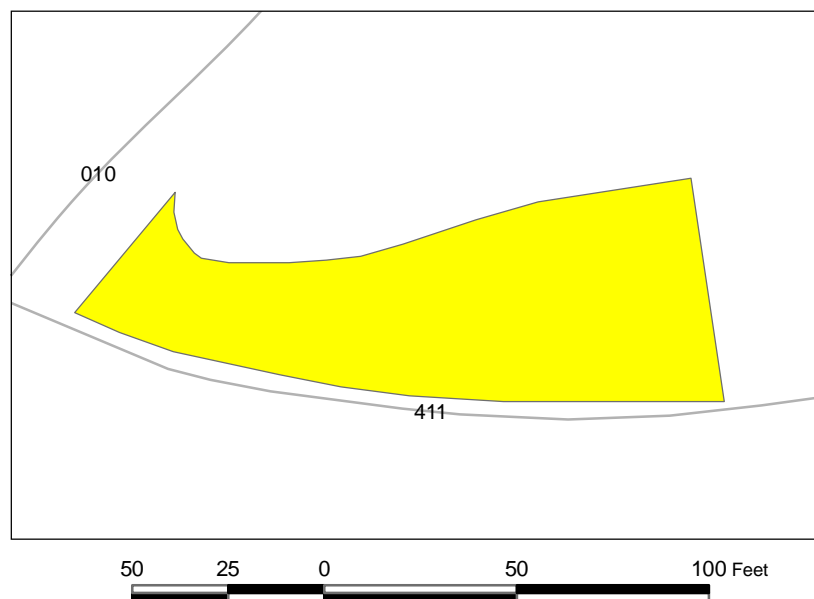
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
	4/26/2008	Gravel	7870	Poor	\$8200



Ouray

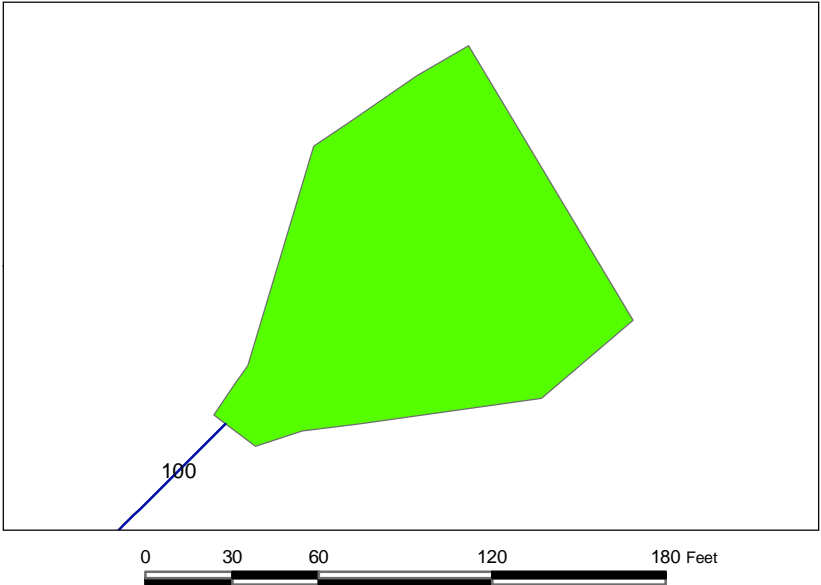
Route 902: Leota Bottoms Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10036034	4/26/2008	Gravel	4931	Fair	\$1200



Ouray
Route 903: Leota Bluff Parking

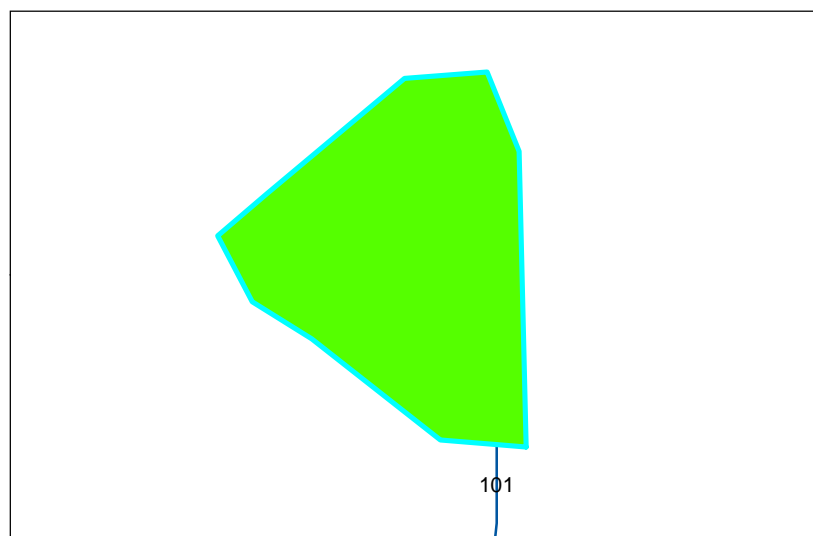
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
	4/26/2008	Gravel	8531	Good	1200



Ouray

Route 904: Johnson Bluff Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
	4/26/2008	Gravel	50600	Good	10859

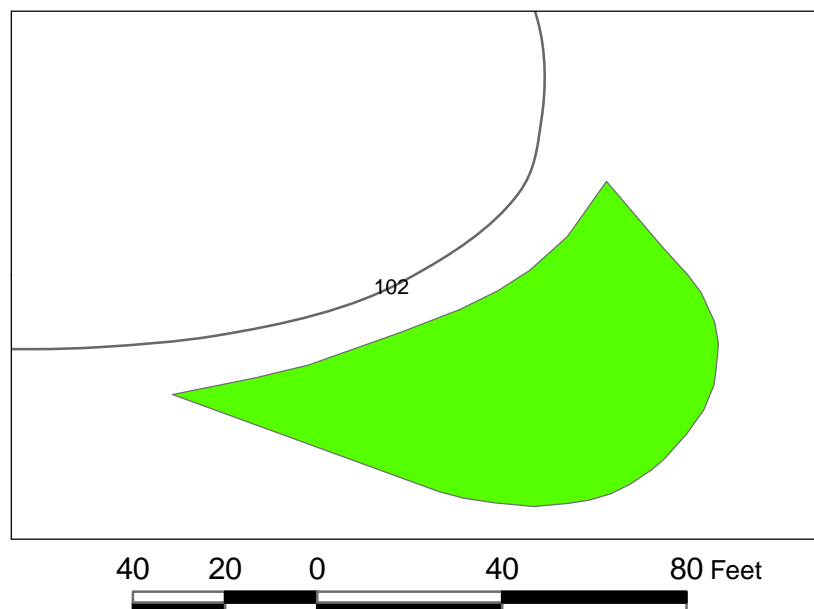


0 40 80 160 240 Feet

Ouray

Route 905: Green River Geology Parking

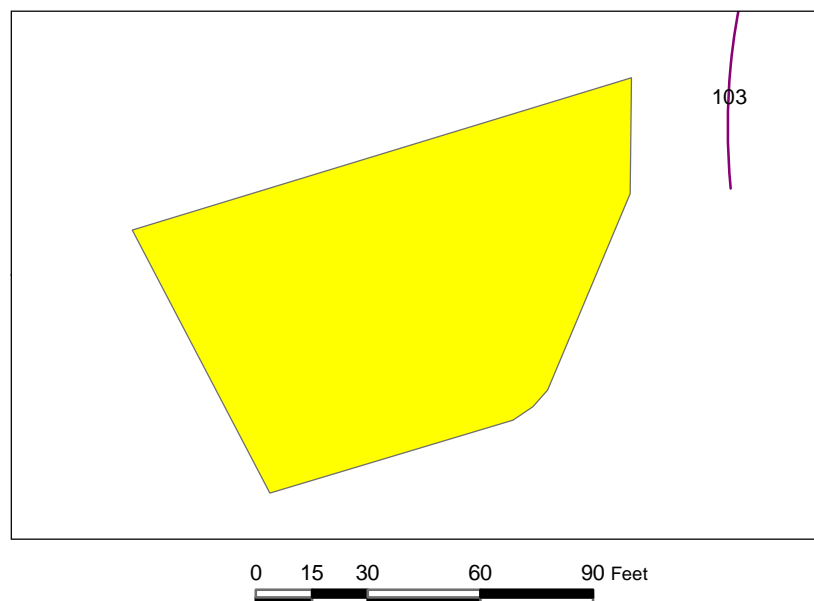
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
	4/26/2008	Gravel	3023	Good	400



Ouray

Route 906: Wildlife Viewing Area Parking

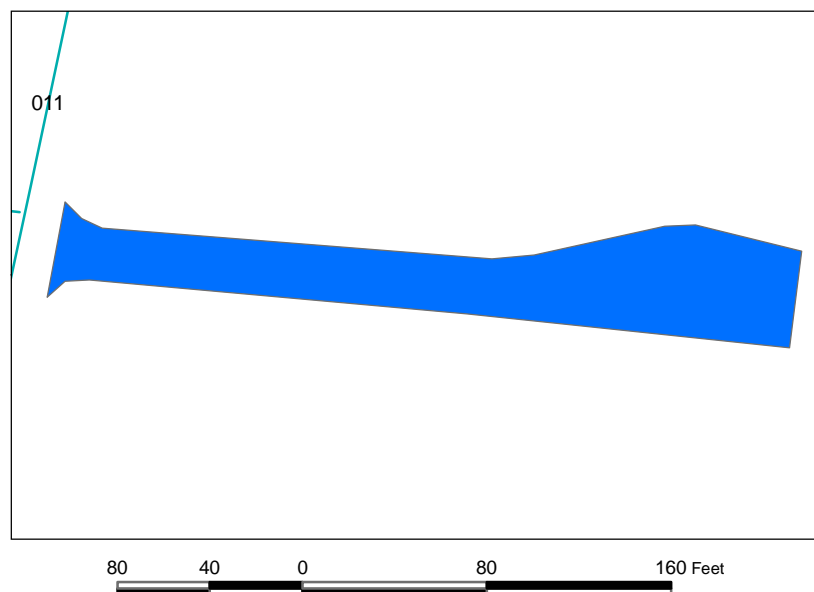
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
	4/262008	Gravel	31300	Fair	6731



Ouray

Route 907: Green River Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
	7/20/2004	Gravel	7567	Excellent	0

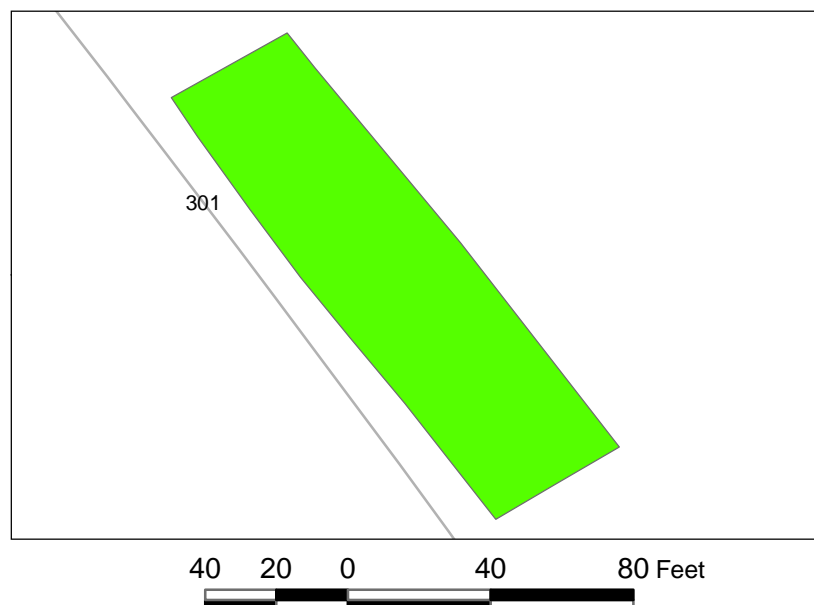


* Unable to assess at the time of the inventory due to construction

Ouray

Route 908: Overflow Office Parking

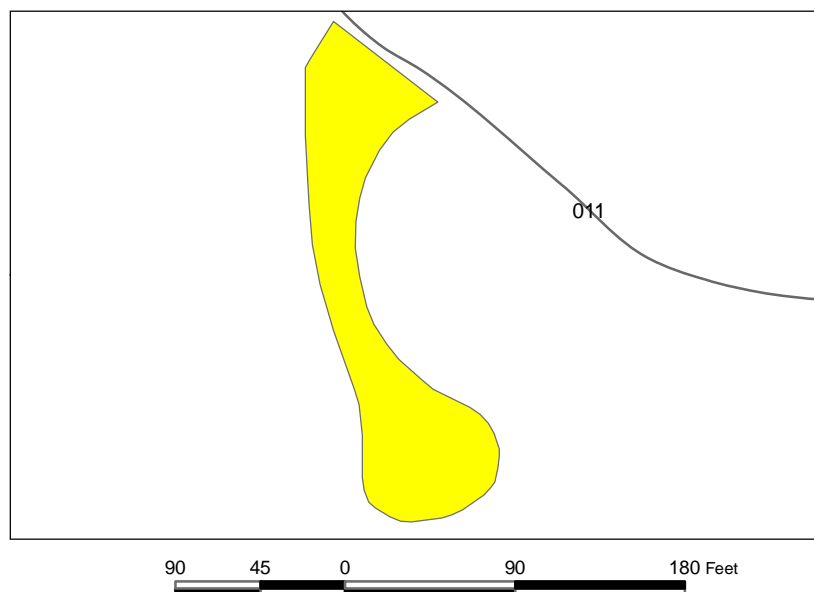
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10036044	4/28/2008	Gravel	4317	Good	\$600



Ouray

Route 909: Sheppard Drain Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10036032	4/26/2008	Gravel	7956	Fair	\$2000



Ouray National Wildlife Refuge Bridge Inventory					
Rte #	Milepost	NBIS #	Sufficiency Rating	Functionally Obsolete	Structurally Deficient
010	3.58				
010	4.3	65570-00220	96	No	No
107	0.1				
403	0.78				
411	0.01				

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4356 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4359 - MP 1.14 - Begin Section 002

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4362 - MP 2.00 - Begin Section 003

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4369 - MP 3.05 - Begin Section 004

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4374 - MP 3.58 - Bridge

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4375 - MP 3.72 - Culvert Deficiency

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4376 - MP 3.72 - Culvert Deficiency

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4377 - MP 4.04 - Begin Section 005

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4378 - MP 4.30 - Bridge

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4379 - MP 5.01 - Begin Section 006

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4380 - MP 6.02 - Begin Section 007

ROUTE NUMBER: 010 ROUTE NAME: Refuge Entrance/Hatchery Road



Photo # 4381 - MP 6.22 - Begin Section 008

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 011 ROUTE NAME: Auto Tour Route



Photo # 4328 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 011 ROUTE NAME: Auto Tour Route



Photo # 4333 - MP 0.98 - Begin Section 002

ROUTE NUMBER: 011 ROUTE NAME: Auto Tour Route



Photo # 4338 - MP 1.99 - Begin Section 003

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 011 ROUTE NAME: Auto Tour Route



Photo # 4339 - MP 3.01 - Begin Section 004

ROUTE NUMBER: 011 ROUTE NAME: Auto Tour Route



Photo # 4341 - MP 3.16 - Begin Section 005

ROUTE NUMBER: 011 ROUTE NAME: Auto Tour Route



Photo # 4342 - MP 4.17 - Begin Section 006

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 100 ROUTE NAME: Leota Bluff Road



Photo # 4313 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 100 ROUTE NAME: Leota Bluff Road



Photo # 4314 - MP 1.10 - Begin Section 002

ROUTE NUMBER: 100 ROUTE NAME: Leota Bluff Road



Photo # 4315 - MP 2.11 - Begin Section 003

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 100 ROUTE NAME: Leota Bluff Road



Photo # 4316 - MP 3.09 - Begin Section 004

ROUTE NUMBER: 101 ROUTE NAME: Leota Bluff Spur



Photo # 4319 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 102 ROUTE NAME: Green River Geology Loop



Photo # 4322 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 103 ROUTE NAME: Wildlife Viewing Area Access Road



Photo # 4325 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 104 ROUTE NAME: Johnson Bottom Road



Photo # 4645 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 104 ROUTE NAME: Johnson Bottom Road



Photo # 4646 - MP 2.02 - Begin Section 003

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 104 ROUTE NAME: Johnson Bottom Road



Photo # 4647 - MP 2.82 - Begin Section 004

ROUTE NUMBER: 105 ROUTE NAME: Wyaskett Pond Loop



Photo # 304 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 106 ROUTE NAME: Leota Boat Ramp Access Road



Photo # 300 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 300 ROUTE NAME: Residential Driveway



Photo # 4353 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 300 ROUTE NAME: Residential Driveway



Photo # 4354 - MP 0.00 - Begin Section 002

ROUTE NUMBER: 300 ROUTE NAME: Residential Driveway



Photo # 4538 - MP 0.02 - Begin Section 003

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 301 ROUTE NAME: Maintenance Area Driveway



Photo # 4355 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 301 ROUTE NAME: Maintenance Area Driveway



Photo # 4536 - MP 0.08 - Begin Section 002

ROUTE NUMBER: 301 ROUTE NAME: Maintenance Area Driveway



Photo # 4537 - MP 0.10 - Begin Section 003

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 400 ROUTE NAME: Parker East Dike Road



Photo # 4539 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 401 ROUTE NAME: S4/Parker Dike Road



Photo # 4540 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 402 ROUTE NAME: West Parker Dike Road



Photo # 4541 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 403 ROUTE NAME: S3/S5 Dike Road



Photo # 4542 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 403 ROUTE NAME: S3/S5 Dike Road



Photo # 4545 - MP 0.78 - Bridge

ROUTE NUMBER: 404 ROUTE NAME: S3/S4 Dike Road



Photo # 4547 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 405 ROUTE NAME: S1/S2 Dike Road



Photo # 4551 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 406 ROUTE NAME: S1/S1A Service Road



Photo # 4555 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 407 ROUTE NAME: S1/S1A Dike Road



Photo # 4556 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 408 ROUTE NAME: L1/L2 Main Leota Road



Photo # 4560 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 409 ROUTE NAME: L4 East Dike Road



Photo # 4569 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 410 ROUTE NAME: L6 East Dike Road



Photo # 4572 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 411 ROUTE NAME: L10/River Dike Road



Photo # 4579 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 411 ROUTE NAME: L10/River Dike Road



Photo # 4579 - MP 0.01 - Bridge

ROUTE NUMBER: 412 ROUTE NAME: L7/L3 Leota Riverside Dike Road



Photo # 4583 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 412 ROUTE NAME: L7/L3 Leota Riverside Dike Road



Photo # 4587 - MP 1.02 - Begin Section 002

ROUTE NUMBER: 412 ROUTE NAME: L7/L3 Leota Riverside Dike Road



Photo # 4588 - MP 2.02 - Begin Section 003

ROUTE NUMBER: 413 ROUTE NAME: L3 West Dike Road



Photo # 4589 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 414 ROUTE NAME: L5 West Dike Road



Photo # 4590 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 415 ROUTE NAME: L7 West Dike Road



Photo # 4591 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 416 ROUTE NAME: L5/L7 Dike Road



Photo # 4592 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 417 ROUTE NAME: L9/L10 Dike Road



Photo # 4597 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 418 ROUTE NAME: L6/L8 Dike Road



Photo # 4599 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 418 ROUTE NAME: L6/L8 Dike Road



Photo # 4604 - MP 0.27 - Culvert Deficiency

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 419 ROUTE NAME: L8/L9 Dike Road



Photo # 4607 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 420 ROUTE NAME: L4/L6 Dike Road



Photo # 4610 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 420 ROUTE NAME: L4/L6 Dike Road



Photo # 4614 - MP 0.32 - Culvert Deficiency

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 420 ROUTE NAME: L4/L6 Dike Road



Photo # 4615 - MP 0.32 - Culvert Deficiency

ROUTE NUMBER: 421 ROUTE NAME: L3/L5 Dike Road



Photo # 4618 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 422 ROUTE NAME: L1/L3 Dike Road



Photo # 4619 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 422 ROUTE NAME: L1/L3 Dike Road



Photo # 4623 - MP 0.27 - Culvert Deficiency

ROUTE NUMBER: 422 ROUTE NAME: L1/L3 Dike Road



Photo # 4624 - MP 0.27 - Culvert Deficiency

ROUTE NUMBER: 423 ROUTE NAME: L2/L4 Dike Road



Photo # 4627 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 424 ROUTE NAME: Leota North Service Road



Photo # 4635 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 424 ROUTE NAME: Leota North Service Road



Photo # 4638 - MP 0.60 - Culvert Deficiency

ROUTE NUMBER: 424 ROUTE NAME: Leota North Service Road



Photo # 4639 - MP 0.60 - Culvert Deficiency

FEATURES PHOTOGRAPHS

ROUTE NUMBER: 424 ROUTE NAME: Leota North Service Road



Photo # 4642 - MP 1.01 - Begin Section 002

Accident Summary

Number of Accidents Reported	Timespan of Accidents	Injuries	Fatalities
0	No Accidents to Report	0	0

APPENDIX

FWS ROAD FUNCTIONAL CLASSIFICATION	
Class I	Principal Refuge Road (Public Roads) - Routes that constitute the main access route, main auto tour route, or thoroughfare for refuge visitors. These routes are accessible by 2WD vehicles. Routes are numbered from 10 to 99.
Class II	Connector Refuge Road (Public Roads) - Routes that provide circulation within the refuge. These routes can also provide access to areas of scenic, scientific, recreational or cultural interest, such as overlooks, campgrounds, education centers, etc. These routes are accessible by 2WD vehicles. Routes are numbered from 100 to 199.
Class III	Special Purpose Refuge Road (Public Roads) - Roads that provide circulation within special use areas such as campgrounds or public concessionaire facilities or access to remote areas of the refuge. These routes may not be 2WD accessible. Routes are numbered from 200 to 299
Class IV	Administrative Access Road (Administrative Roads) - Routes intended for access to administrative developments or structures such as maintenance offices, employee quarters, or utility areas. These routes are accessible by 2WD vehicles. These routes may restrict access to the general public. Routes are numbered from 300 to 399.
Class V	Restricted Road (Administrative Roads) - Routes normally closed to the public, such as maintenance roads, service roads, patrol roads, and fire breaks. These routes may be open to the public for a short period of time for a special use, such as hunting access. These routes may not be 2WD accessible. Routes are numbered from 400 to 499.

A refuge road system contains those routes within or giving access to a refuge or other unit of the FWS that are administered by the FWS, or by the Service in cooperation with other agencies. The assignment of a functional classification (FC) to a refuge road is not based on traffic volumes or design speed, but on the intended use or function of that route.

DESCRIPTION OF RATING SYSTEM

Rating Data is collected on five different surface types: Asphalt, Concrete, Gravel, Native Improved and Native Primitive. The Utah LTAP Center's Remaining Service Life (RSL) system is used for all surface types. The RSL system is based on the Strategic Highway Research Program's (SHRP) Distress Identification Manual.

Asphalt Rating System

Data is collected on the following distresses and conditions:

- **Fatigue Cracking** - Interconnected cracks forming small irregular shapes.
- **Longitudinal Cracking** - Cracks running parallel with the roadway, in the direction of traffic.
- **Transverse Cracking** - Cracks perpendicular to the roadway, going across the lane or lanes.
- **Block Cracking** - Interconnected cracks forming large blocks.
- **Edge Cracking** - Cracks running along the edge of the pavement surface.
- **Patches** - Original surface repaired with new asphalt patch material.
- **Potholes** - Holes or depressions in the pavement.
- **Rutting** - surface depressions in the wheel paths.
- **Roughness** - Evenness of pavement for serviceability.
- **Drainage** - Ability of the road surface to drain water based on proper slope.

A Condition Rating value is calculated for each homogenous pavement section, and can be up to 1 mile in length.

Rating Index Formula

Fatigue, longitudinal, transverse, block, and edge cracking, along with patching and potholes are rated on a 0 - 9 scale (0 = no distress, 9 = maximum distress). The rating given is based on the extent and the severity of the distress. Rutting, roughness, and drainage are rated on a 0 - 3 scale (0 = excellent, 3 = poor). Each distress type has a given Remaining Service Life (RSL) value (in years) based on the rating for that distress. The distress rating resulting in the lowest RSL value is considered to be the governing distress. That value is assigned as the RSL of the road segment.

Concrete Rating System

Data is collected on the following distresses and conditions:

- **Spalling of Joints** - Chipping, breaking, or cracking of slab edges
- **Joint Seal Damage** - Any damage or condition that enables materials or water to infiltrate into the joint from the surface.
- **Corner Breaks** - A portion of the slab separated by a crack that intersects the adjacent transverse and longitudinal joints, forming approximately a 45° angle to the direction.
- **Broken Slabs** - Faulting and/or cracking localized to individual slabs.
- **Faulting** - Difference in elevation across a crack or joint.
- **Longitudinal Cracking** - Cracks in the pavement running parallel to road.

- **Transverse Cracking** - Cracks in the pavement running perpendicular to the direction of traffic.
- **Patch Deterioration** – Faulting, settling, or cracking of previously placed patch
- **Map Cracking** – A series of cracks that extend only into the upper surface of the Slab

A Condition Rating value is calculated for each homogenous pavement section, and can be up to 1 mile in length.

Rating Index Formula

The rating procedure for concrete pavement is the same as that for asphalt pavement described previously. Each of the distresses described above are rated on the same 0 – 9 scale. The governing distress is then determined and the RSL associated with that distress is assigned to the road segment.

Gravel and Native Improved Rating System

Data is collected on the following distresses and conditions:

- **Cross Section (Gravel, Native Improved only)** - Roadway built so that the center is higher than the shoulder, to prevent water from pooling on roadway.
- **Roadside Drainage (Gravel, Native Improved only)** - Roadside ditches and culverts to handle water flow and prevent pooling on the roadside.
- **Corrugations (Washboarding)** - Small trenches or holes developing perpendicular to the roadway.
- **Potholes** - Holes or depressions in the roadway.
- **Rutting** - Depressions running parallel with the roadway, in the wheelpaths.
- **Dust** - Amount of dust caused by traffic.
- **Loose Aggregate (Gravel Only)** - Loose gravel, typically piled up on the roadway edges or centerline.

A Condition Rating value is calculated for each homogenous pavement section, and can be up to 1 mile in length.

Rating Index Formula

The rating procedure for unpaved roads is the same as that for asphalt and concrete pavements described previously. Of the distresses described above, corrugations, potholes, rutting, and loose aggregate are rated on the same 0 – 9 scale previously mentioned. Cross section, roadside drainage, and dust are rated on the same 0 – 3 scale described for asphalt pavement. The governing distress is then determined and the RSL associated with that distress is assigned to the road segment.

Condition Descriptions by Surface Type

The following definitions are used to describe pavement condition for the various surface types. These are general guidelines for condition indications.

Asphalt

Excellent – Recently constructed or overlaid road where construction or overlay was performed correctly- No maintenance required. RSL = 19-20 years.

Good – Low extent longitudinal and transverse cracks. All cracks are 1/4" or less with little or no crack erosion. Patches are in good condition and applied correctly. Routine Maintenance recommended. RSL = 13-18 years.

Fair - Roads are in good structural condition with little or no fatigue cracking. Longitudinal, transverse, and edge cracking is at medium extent and severity. Block cracking is not extensive. Any patches are in good condition. Preventative maintenance recommended. RSL = 7-12 years.

Poor - Road beginning to show signs of structural distress. Fatigue cracking is medium to high extent and medium severity. Cracking will be severe. Surface may have severe block cracking and show. Patches are in fair to poor condition. There is moderate distortion or rutting and occasional potholes. Rehabilitation recommended. RSL = 1-6 years.

Failed - Road is severely deteriorated. Signs of structural failure appear along with severe and extensive fatigue cracking, distortion, potholes, or extensive patches in poor condition. Reconstruction recommended. RSL = 0 years.

Concrete

Excellent - New pavement. No maintenance required. RSL = 19-20 years

Good - First signs of transverse cracking, patch or repair, more extensive pop-outs, or scaling. Sealing or routine maintenance recommended. RSL = 13-18 years.

Fair – Pavement has joint or crack spalling, and/or faulting, along with cracking at corners with broken pieces. Any Patches are in fair condition and faulting is at a minimum. Preventative maintenance recommended. RSL = 7-12 years.

Poor - Joints and cracks are open 1 inch, spalled, or patched. Faulting is more severe. Rehabilitation recommended. RSL = 1-6 years.

Failed - Most slabs have failed structurally, and faulting is severe. Reconstruction recommended. RSL = 0 years.11-9

The following table shows the relationship between RSL and condition.

SUBJECTIVE CONDITION RATING FOR REMAINING SERVICE LIFE (Asphalt and Concrete Pavements)								
	FAILED	POOR		FAIR		GOOD		EXCELLENT
RSL Years	0	1-3	4-6	7-9	10-12	13-15	16-18	19-20

Gravel and Native

Excellent - Newly constructed road that has been constructed properly with proper crown, drainage and gravel layer. Little or no distress. No maintenance recommended. RSL = 8-10 years.

Good - Crown, drainage provisions, and gravel layer are in good condition. Distress limited to traffic effects such as dust, loose aggregate, and low severity corrugations (wash boarding). RSL = 5-7 years.

Fair - Adequate drainage and crown through majority of roadway. Crown repair, ditch improvement may be necessary. Road has more severe corrugations and potholes. Preventative maintenance recommended. RSL = 3-4 years.

Poor - Travel at slow speeds is necessary. Additional gravel layer needed to carry traffic. Poor crown. Ditching is inadequate and rutting is extensive and severe. Rehabilitation recommended. RSL = 1-2 years.

Failed - Travel is difficult, and road may be closed at times. Rutting and Corrugations are very severe. Total Reconstruction of road is recommended. RSL = 0 years.

The following table shows the RSL values for gravel and native roads in terms of excellent, good, fair, poor, and failed condition.

SUBJECTIVE CONDITION RATING FOR REMAINING SERVICE LIFE (Gravel and Native Surfaces)					
	FAILED	POOR	FAIR	GOOD	EXCELLENT
RSL Years	0	1-2	3-4	5-7	8-10